SEQUENCE LISTING

<110> Frudakis, Tony N.
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Reed, Steven G.
Misher, Lynda
Retter, Marc W.
Dillon, Davin C.

<120> COMPOSITIONS AND METHODS FOR THE TREATMENT AND DIAGNOSIS OF BREAST CANCER

<130> 210121.419C7

<140> US
<141> 2000-03-23

<160> 317

<170> FastSEQ for Windows Version 3.0

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<212> DNA
<213> Homo sapien

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ttgtctaagg cgattgaagt cgtccagggg catgatgagt caccaggagt gtttttagag 180
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catgctctta atttggcatt tgtggctcag gcagccccag atagtaaaag gaaactccaa 300
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ttt 363

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<212> PRT
<213> Homo sapien

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Gly Arg Thr Phe Asp Asp Phe His Arg Tyr Leu Leu Val Gly Ile Gln
20 25 30
Gly Ala Ala Gln Lys Pro Ile Asn Leu Ser Lys Ala Ile Glu Val Val
35 40 45
Gln Gly His Asp Glu Ser Pro Gly Val Phe Leu Glu His Leu Gln Glu
50 55 60
Ala Tyr Arg Ile Tyr Thr Pro Phe Asp Leu Ala Ala Pro Glu Asn Ser

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65                  70                  75                  80
His Ala Leu Asn Leu Ala Phe Val Ala Gln Ala Ala Pro Asp Ser Lys
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Ala Phe Arg Asp Ser Leu Lys Gly Phe
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<400> 3

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tcttcaaagc ctaacagatc aagcagctct ccggtgcaca acctgcgccc aggtaaatgc    180
caaaaaaggt cctaaaccca gcccaggcca ccgtctccaa gaaaactcac caggagaaaa    240
gtgggaaatt gactttacag aagtaaaacc acaccgggct gggtacaaat accttctagt    300
actggtagac accttctctg gatggactga agcatttgct accaaaaacg aaactgtcaa    360
tatggtagtt aagtttttac tcaatgaaat catccctcga cgtgggctgc ctgttgccat    420
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gcccatttgg caaaaatttc ncaactaatt tntacgtncc tacgtctccc caacaggtan    780
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<212> DNA
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<220>
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<400> 4

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tttccatcat tttaaggggt taaaatcatc ttgttcagac ctcagcatat aaaatgaccc     180
atctgtagac ctcaggctcc aaccataccc caagagttgt ctggttttgt ttaaattact     240
gccaggtttc agctgcagat atccctggaa ggaatattcc agattccctg agtagtttcc     300
aggttaaaat cctataggct tcttctgttt tgaggaagag ttcctgtcag agaaaaacat     360
gattttggat ttttaacttt aatgcttgtg aaacgctata aaaaaaattt tctaccccta     420
gctttaaagt actgttagtg agaaattaaa attccttcag gaggattaaa ctgccatttc     480
agttacccta attccaaatg ttttggtggt tagaatcttc tttaatgttc ttgaagaagt     540
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cctcnaatnt tnggnntang gcttaccccc cccngnngtt tttcctccat tnaaattttc     900
tntggantct tgaatnncgg gtttcccctt ttaaaccnat ttttttttn nnncccccan      960
ttttncctcc cccntntnta angggggttt cccaanccgg gtccnccccc angtccccaa    1020
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aggtaacaca catactatct cccaaatacc tacccacaag ctcaacaatt ttaaactgtt     180
aggatcactg gctctaatca ccatgacatg aggtcaccac caaaccatca agcgctaaac     240
agacagaatg tttccactcc tgatccactg tgtgggaaga agcaccgaac ttacccactg     300
gggggcctgc ntcanaanaa aagcccatgc ccccgggtnt ncctttnaac cggaacgaat     360
naacccacca tccccacanc tcctctgttc ntgggccctg catcttgtgg cctcntntnc     420
tttnggggan acntggggaa ggtaccccat ttcnttgacc ccncnanaaa accccngtgg     480
ccctttgccc tgattcncnt gggccttttc tcttttccct tttgggttgt ttaaattccc     540
aatgtccccn gaaccctctc cntnctgccc aaaacctacc taaattnctc nctangnntt     600
ttcttggtgt tncttttcaa aggtnacctt ncctgttcan ncccnacnaa aatttnttcc     660
ntatnntggn cccnnaaaaa nnnatcnncc cnaattgccc gaattggttn ggtttttcct     720
nctgggggaa accctttaaa tttccccctt ggccggcccc ccttttttcc cccctttnga     780
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ttcctaaaat taaaaaatan ccggttnngg nnggcctctt tcccctccng gngggnngng     900
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<210> 6
<211> 950
<212> DNA
<213> Homo sapien

<220>
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<223> n = A,T,C or G

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ctgggattac aggcgtgcaa caccacaccc ggctaatttt gtatttttaa tagagatggg 180
gttttccctt gttggccann atggtctcna acccctgacc tcnngtgatc ccccncccn 240
nganctcnna ctgctgggga tnnccgnnnn nnncctcccn ncncnnnnnn ncncnntccn 300
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cnnnccncnt ncccncnnnt tcncntncnn tntccnncnn nntcnncnnn cnnnncntnn 420
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tntcncnttc ntcnntncnt tnctntcnnc nncnntncnc tnccntntnt ctnnntcncn 780
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<210> 7
<211> 1086
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(1086)
<223> n = A,T,C or G

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agaaaaattc ttctgccttg agatgctgtt aatctgtaac cctagcccca accctgtgct 180
cacagagaca tgtgctgtgt tgactcaagg ttcaatggat ttagggctat gctttgttaa 240
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gtccaagatt tctccccatg tgatagcctg agatatggcc tcatgggaag ggtaagacct 420
gactgtcccc cagcccgaca tcccccagcc cgacatcccc cagcccgaca cccgaaaagg 480
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atactgctct ttaatgcacg agatgtttgt ntaattgcca tccagggcca ncccctttcc 720
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gccccctcaa attataacct ttccnaaaca aannggttcn aaggtggttt gnttccggtg 1020
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ntcccc 1086

<210> 8
<211> 1177
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(1177)
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gggatattaa cgttaacact gacagcaggt acgcctttgc tactgtgcat gtacgtggag 480
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catcaaaagg aaaacnnggc tgttgcccgt ggtaaccana aanctgatcn ncagctcnaa 600
gatgctgtgt tgactttcac tcncncctct taaacttgct gcccacantc tcctttccca 660
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accaataaaa acggggangg tnggtnganc nncctgaccc aaaaataatg gatcccccgg 780
gctgcaggaa ttcaattcan ccttatcnat accccaacn nggngggggg ggccngtncc 840
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<210> 9
<211> 1146
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(1146)
<223> n = A,T,C or G

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cccccatttt ccnaaacttt ttcccancna ggaanccncc ctttttttng gtcngattna 1080
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atagan 1146

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<211> 545
<212> DNA
<213> Homo sapien

<400> 10
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tattggctct gagttctgag gccagttttc ttcttctgtt gagtatgcgg gattgtcagg 180
cagatctggc tgtggaaagg agactgtggg cagcaagttt agaggcgtga ctgaaagtca 240
cactgcatct tgagctgctg aatcagcttt ctggttacca cgggcaacag ccgtgttttc 300
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accgg 545

<210> 11
<211> 196
<212> DNA
<213> Homo sapien

<400> 11
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ggggggatcg cttgagccca agatttcaag actagtctgg gtaacatagt gagaccctat 120
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aatcgagcct aggaga 196

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<213> Homo sapien

<220>

<221> misc_feature
<222> (1)...(388)
<223> n = A,T,C or G

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aataaaatag ggaaaacgat gtctgtgtat agccaagtca gntatcctaa aaggagatac 180
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tactatacct cctttatagc ctaggaga 388

<210> 13
<211> 337
<212> DNA
<213> Homo sapien

<400> 13
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acaagatatg atttctacat cagatgcttt ttcctttcct gtttatttcc ttttatttc 180
ggttgtgggg tcgaatgtaa tagctttgtt tcaagagaga gttttggcag tttctgtagc 240
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tgagaggtct atttttttcca tatttgggca actacta 337

<210> 14
<211> 571
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(571)
<223> n = A,T,C or G

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aaaatcatat ttcatatttt acgctcgagg gtttttaccg gttccttttt acactcctta 180
aaacagtttt taagtcgttt ggaacaagat attttttctt tcctggcagc ttttaacatt 240
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gtttggagcg gctgctgtat atagttttaa atggtttatt gcacctcctt aagttgcact 420
tatgtggggg ggggnttttg natagaaagt ntttantcac anagtcacag ggacttttnt 480
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gaggcctttc tcttagaggg gggaactnct a 571

<210> 15
<211> 548
<212> DNA

<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(548)
<223> n = A,T,C or G

<400> 15
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taaaagtatt tccaaaaagc ataaaaccaa agtatcatac caaaccaaat tcatactgct 120
tcccccaccc gcactgaaac ttcaccttct aactgtctac ctaaccaaat tctacccttc 180
aagtctttgg tgcgtgctca ctactctttt ttttttttt tttnttttgg agatggagtc 240
tggctgtgca gcccaggggt ggagtacaat ggcacaacct cagctcactg naacctccgc 300
ctcccaggtt catgagattc tcctgnttca gccttcccag tagctgggac tacaggtgtg 360
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ggccaggntg gtntcgaact cctgacctca agtgatccac ccacctcagg ctcccaaagt 480
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aactacta 548

<210> 16
<211> 638
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(638)
<223> n = A,T,C or G

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gctggtaagc actctgacta cacgaaattg ttcagatgtg atggatttat gacagttgat 180
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ggtttagctc aagatgatat agaaatagaa cagaaagaga ctacaaatga agatgtatca 300
ccaactgata ttgaagagcc tatagtagaa aatgaattag ctgcatttat tagccttaca 360
catagcgatt ttcctgatga atcttatatt cagccatcga catagcatta cctgatgggc 420
aaccttacga ataatagaaa ctgggtgcgg ggctattgat gaattcatcc ncagtaaatt 480
tggatatnac aaaatataac tcgattgcat ttggatgatg gaatactaaa tctggcaaaa 540
gtaactttgg agctactagt aacctctctt tttgagatgc aaaattttct tttagggttt 600
cttattctct actttacgga tattggagca taacggga 638

<210> 17
<211> 286
<212> DNA
<213> Homo sapien

<400> 17
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tgccttagcg gcggcgaagt caatgggcgt ctcaccctat ccttttgcca tggtggtggc 180

gatggcggct tcggcggcgt ttatgacccc ggtctcctcg ccggttaaca ccctggtgct 240
tggccctggc aagtactcat ttagcgattt tgtcaaaata ggcgtg 286

<210> 18
<211> 262
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(262)
<223> n = A,T,C or G

<400> 18
tcggtcatag cagccccttc ttctcaattt catctgtcac taccctggtg tagtatctca 60
tagccttaca tttttatagc ctcctccctg gtctgtcttt tgattttcct gcctgtaatc 120
catatcacac ataactgcaa gtaaacattt ctaaagtgtg gttatgctca tgtcactcct 180
gtgncaagaa atagtttcca ttaccgtctt aataaaattc ggatttgttc tttnctattn 240
tcactcttca cctatgaccg aa 262

<210> 19
<211> 261
<212> DNA
<213> Homo sapien

<400> 19
tcggtcatag caaagccagt ggtttgagct ctctactgtg taaactccta aaccaaggcc 60
atttatgata aatggtggca ggatttttat tataaacatg tacccatgca aatttcctat 120
aactctgaga tatattcttc tacatttaaa caataaaaat aatctatttt taaaagccta 180
atttgcgtag ttaggtaaga gtgtttaatg agagggtata aggtataaat caccagtcaa 240
cgtttctctg cctatgaccg a 261

<210> 20
<211> 294
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(294)
<223> n = A,T,C or G

<400> 20
tacaacgagg cgacgtcggt aaaatcggac atgaagccac cgctggtctt ttcgtccgag 60
cgataggcgc cggccagcca gcggaacggt tgcccggatg gcgaagcgag ccggagttct 120
tcggactgag tatgaatctt gttgtgaaaa tactcgccgc cttcgttcga cgacgtcgcg 180
tcgaaatctt cganctcctt acgatcgaag tcttcgtggg cgacgatcgc ggtcagttcc 240
gccccaccga aatcatggtt gagccggatg ctgnccccga agncctcgtt tgtn 294

<210> 21
<211> 208

<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(208)
<223> n = A,T,C or G

<400> 21
ttggtaaagg gcatggacgc agacgcctga cgtttggctg aaaatctttc attgattcgt 60
atcaatgaat aggaaaattc ccaaagaggg aatgtcctgt tgctcgccag tttttntgtt 120
gttctcatgg anaaggcaan gagctcttca gactattggn attntcgttc ggtcttctgc 180
caactagtcg ncttgcnang atcttcat 208

<210> 22
<211> 287
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(287)
<223> n = A,T,C or G

<400> 22
nccnttgagc tgagtgattg agatntgtaa tggttgtaag ggtgattcag gcggattagg 60
gtggcgggtc acccggcagt gggtctcccg acaggccagc aggatttggg gcaggtacgg 120
ngtgcgcatc gctcgactat atgctatggc aggcgagccg tggaaggngg atcaggtcac 180
ggcgctggag ctttccacgg tccatgnatt gngatggctg ttctaggcgg ctgttgccaa 240
gcgtgatggt acgctggctg gagcattgat ttctggtgcc aaggtgg 287

<210> 23
<211> 204
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(204)
<223> n = A,T,C or G

<400> 23
ttgggtaaag ggagcaagga gaaggcatgg agaggctcan gctggtcctg gcctacgact 60
gggccaagct gtcgccgggg atggtggaga actgaagcgg gacctcctcg aggtcctccg 120
ncgttacttc nccgtccagg aggagggtct ttccgtggtc tnggaggagc ggggggagaa 180
gatnctcctc atggtcnaca tccc 204

<210> 24
<211> 264
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(264)
<223> n = A,T,C or G

<400> 24
tggattggtc aggagcgggt agagtggcac cattgagggg atattcaaaa atattatttt 60
gtcctaaatg atagttgctg agtttttctt tgacccatga gttatattgg agtttatttt 120
ttaactttcc aatcgcatgg acatgttaga cttatttttct gttaatgatt nctattttta 180
ttaaattgga tttgagaaat tggttnttat tatatcaatt tttggtattt gttgagtttg 240
acattatagc ttagtatgtg acca 264

<210> 25
<211> 376
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(376)
<223> n = A,T,C or G

<400> 25
ttacaacgag gggaaactcc gtctctacaa aaattaaaaa attagccagg tgtggtggtg 60
tgcacccgca atcccagcta cttgggaggt tgagacacaa gantcaccta natgtgggag 120
gtcaaggttg catgagtcat gattgtgcca ctgcactcca gcctgggtga cagaccgaga 180
ccctgcctca anaganaang aataggaagt tcagaaatcn tggntgtggn gcccagcaat 240
ctgcatctat ncaacccctg caggcaangc tgatgcagcc tangttcaag agctgctgtt 300
tctggaggca gcagttnggg cttccatcca gtatcacggc cacactcgca cnagccatct 360
gtcctccgtn tgtnac 376

<210> 26
<211> 372
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(372)
<223> n = A,T,C or G

<400> 26
ttacaacgag gggaaactcc gtctctacaa aaattaaaaa attagccagg tgtggtggtg 60
tgcacctgta atcccagcta cttgggcggc tgagacacaa gaaccaccta aatgtgggag 120
ggtcaaggtt gcatgagtca tgatcgcgcc actgcactcc agcctgggtg acagactgag 180
accctgcctc aaaagaaaaa gaataggaag ttcagaaacc ctgggtgtgg ngcccagcaa 240
tctgcattta aacaatccct gcaggcaatg ctgatgcagc ctaagttcaa gagctgctgt 300
tctggaggca gnagtaaggg cttccatcca gcatcacggn caacactgca aaagcacctg 360
tcctcgttgg ta 372

<210> 27
<211> 477
<212> DNA
<213> Homo sapien

<400> 27
ttctgtccac atctacaagt tttatttatt ttgtgggttt tcagggtgac taagtttttc 60
cctacattga aaagagaagt tgctaaaagg tgcacaggaa atcatttttt taagtgaata 120
tgataatatg ggtccgtgct taatacaact gagacatatt tgttctctgt ttttttagag 180
tcacctctta aagtccaatc ccacaatggt gaaaaaaaaa tagaaagtat ttgttctacc 240
tttaaggaga ctgcagggat tctccttgaa aacggagtat ggaatcaatc ttaaataaat 300
atgaaattgg ttggtcttct gggataagaa attcccaact cagtgtgctg aaattcacct 360
gacttttttt gggaaaaaat agtcgaaaat gtcaatttgg tccataaaat acatgttact 420
attaaaagat atttaaagac aaattctttc agagctctaa gattggtgtg gacagaa 477

<210> 28
<211> 438
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(438)
<223> n = A,T,C or G

<400> 28
tctncaacct cttgantgtc aaaaaccttn taggctatct ctaaaagctg actggtattc 60
attccagcaa aatccctcta gtttttggag tttcctttta ctatctgggg ctgcctgagc 120
cacaaatgcc aaattaagag catggctatt ttcgggggct gacaggtcaa aaggggtgta 180
aatccgataa gcctcctgga ggtgctctaa aaacactcct ggtgactcat catgcccctg 240
gacgacttca atcgncttag acaagtttat aggtttctgg gcagctcccc gaatacccac 300
gaggagatac cggtggaaat cgtcaaaagt tctcctctcca cttgagaaat ttgggtccca 360
attaggtccc aattgggtct ctaatcacta ttcctctagc ttcctcctcc ggnctattgg 420
ttgatgtgag gttgaaga 438

<210> 29
<211> 620
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(620)
<223> n = A,T,C or G

<400> 29
aagagggtac cagccccaag ccttgacaac ttccataggg tgtcaagcct gtgggtgcac 60
agaagtcaaa aattgagttt tgggatcctc agcctagatt tcagaggata taaagaaaca 120
cctaacacct agatattcag acaaaagttt actacaggga tgaagctttc acggaaaacc 180
tctactagga aagtacagaa gagaaatgtg ggtttggagc ccccaaacag aatcccctct 240
agaacactgc ctaatgaaac tgtgagaaga tggccactgt catccagaca ccagaatgat 300

agacccacca aaaacttatg ccatattgcc tataaaacct acagacactc aatgccagcc 360
ccatgaaaaa aaaactgaga agaagactgt nccctacaat gccaccggag cagaactgcc 420
ccaggccatg gaagcacagc tcttatatca atgtgacctg gatgttgaga catggaatcc 480
nangaaatcn ttttaanact tccacggttn aatgactgcc ctattanatt cngaacttan 540
atccnggcct gtgacctctt tgctttggcc attccccctt tttggaatgg ctnttttttt 600
cccatgcctg tnccctctta 620

<210> 30
<211> 100
<212> DNA
<213> Homo sapien

<400> 30
ttacaacgag ggggtcaatg tcataaatgt cacaataaaa caatctcttc ttttttttt 60
ttttttttt ttttttttt ttttttttt ttttttttt 100

<210> 31
<211> 762
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(762)
<223> n = A,T,C or G

<400> 31
tagtctatgc gccggacaga gcagaattaa attggaagtt gccctccgga ctttctaccc 60
acactcttcc tgaaaagaga aagaaaagag gcaggaaaga ggttaggatt tcatttcaa 120
gagtcagcta attaggagag cagagtttag acagcagtag gcaccccatg atacaaacca 180
tggacaaagt ccctgtttag taactgccag acatgatcct gctcaggttt tgaaatctct 240
ctgcccataa aagatggaga gcaggagtgc catccacatc aacacgtgtc caagaaagag 300
tctcagggag acaagggtat caaaaaacaa gattcttaat gggaaggaaa tcaaaccaaa 360
aaattagatt tttctctaca tatatataat atacagatat ttaacacatt attccagagg 420
tggctccagt ccttggggct tgagagatgg tgaaaacttt tgttccacat taacttctgc 480
tctcaaattc tgaagtatat cagaatggga caggcaatgt tttgctccac actggggcac 540
agacccaaat ggttctgtgc ccgaagaaga gaagcccgaa agacatgaag gatgcttaag 600
gggggttggg aaagccaaat tggtantatc ttttcctcct gcctgtgttc cngaagtctc 660
cnctgaagga attcttaaaa ccctttgtga ggaaatgccc ccttaccatg acaantggtc 720
ccattgcttt tagggngatg gaaacaccaa gggttttgat cc 762

<210> 32
<211> 276
<212> DNA
<213> Homo sapien

<400> 32
tagtctatgc gtgtattaac ctccccctccc tcagtaacaa ccaaagaggc aggagctgtt 60
attaccaacc ccatttaca gatgcatcaa taatgacaga gaagtgaagt gacttgcgca 120
cacaaccagt aaattggcag agtcagattt gaatccatgg agtctggtct gcactttcaa 180
tcaccgaata ccctttctaa gaaacgtgtg ctgaatgagt gcatggataa atcagtgtct 240

actcaacatc tttgcctaga tatcccgcat agacta 276

<210> 33
<211> 477
<212> DNA
<213> Homo sapien

<400> 33
tagtagttgc caaatatttg aaaatttacc cagaagtgat tgaaaacttt ttggaaacaa 60
aaacaaataa agccaaaagg taaaataaaa atatctttgc actctcgtta ttacctatcc 120
ataacttttt caccgtaagc tctcctgctt gttagtgtag tgtggttata ttaaactttt 180
tagttattat tttttattca cttttccact agaaagtcat tattgattta gcacacatgt 240
tgatctcatt tcatttttc tttttatagg caaaatttga tgctatgcaa caaaaatact 300
caagcccatt atctttttc cccccgaaat ctgaaaattg caggggacag agggaagtta 360
tcccattaaa aaattgtaaa tatgttcagt ttatgtttaa aaatgcacaa aacataagaa 420
aattgtgttt acttgagctg ctgattgtaa gcagttttat ctcaggggca actacta 477

<210> 34
<211> 631
<212> DNA
<213> Homo sapien

<400> 34
tagtagttgc caattcagat gatcagaaat gctgctttcc tcagcattgt cttgttaaac 60
cgcatgccat ttggaacttt ggcagtgaga agccaaaagg aagaggtgaa tgacatatat 120
atatatatat attcaatgaa agtaaaatgt atatgctcat atactttcta gttatcagaa 180
tgagttaagc tttatgccat tgggctgctg catattttaa tcagaagata aaagaaaatc 240
tgggcatttt tagaatgtga tacatgtttt tttaaaactg ttaaatatta tttcgatatt 300
tgtctaagaa ccggaatgtt cttaaaattt actaaaacag tattgtttga ggaagagaaa 360
actgtactgt ttgccattat tacagtcgta caagtgcatg tcaagtcacc cactctctca 420
ggcatcagta tccacctcat agctttacac attttgacgg ggaatattgc agcatcctca 480
ggcctgacat ctgggaaagg ctcagatcca cctactgctc cttgctcgtt gatttgtttt 540
aaaatattgt gcctggtgtc acttttaagc cacagccctg cctaaaagcc agcagagaac 600
agaacccgca ccattctata ggcaactact a 631

<210> 35
<211> 578
<212> DNA
<213> Homo sapien

<400> 35
tagtagttgc catcccatat tacagaaggc tctgtataca tgacttattt ggaagtgatc 60
tgttttctct ccaaacccat ttatcgtaat ttcaccagtc ttggatcaat cttggtttcc 120
actgatacca tgaaacctac ttggagcaga cattgcacag ttttctgtgg taaaaactaa 180
aggtttattt gctaagctgt catcttatgc ttagtatttt ttttttacag tggggaattg 240
ctgagattac attttgttat tcattagata ctttgggata acttgacact gtcttctttt 300
tttcgctttt aattgctatc atcatgcttt tgaaacaaga acacattagt cctcaagtat 360
tacataagct tgcttgttac gcctggtggt ttaaaggact atctttggcc tcaggttcac 420
aagaatgggc aaagtgtttc cttatgttct gtagttctca ataaaagatt gccaggggcc 480
gggtactgtg gctcgcactg taatcccagc actttgggaa gctgaggctg gcggatcatg 540
ttagggcagg tgttcgaaac cagcctgggc aactacta 578

<210> 36
<211> 583
<212> DNA
<213> Homo sapien

<400> 36
tagtagttgc ctgtaatccc agcaactcag gaggctgggg caggagaatc agttgaacct 60
gggaggcaga agttgtaatt agcaaagatc gcaccattgc acttcagcct gggcaacaag 120
agtgagattc catctcaaaa acaaaaaaaa gaaaaagaaa agaaaaggaa aaaacgtata 180
aacccagcca aaacaaaatg atcattcttt taataagcaa gactaattta atgtgtttat 240
ttaatcaaag cagttgaatc ttctgagtta ttggtgaaaa tacccatgta gttaatttag 300
ggttcttact tgggtgaacg tttgatgttc acaggttata aaatggttaa caaggaaaat 360
gatgcataaa gaatcttata aactactaaa aataaataaa atataaatgg ataggtgcta 420
tggatggagt ttttgtgtaa tttaaaatct tgaagtcatt ttggatgctc attggttgtc 480
tggtaatttc cattaggaaa aggttatgat atggggaaac tgtttctgga aattgcggaa 540
tgtttctcat ctgtaaaatg ctagtatctc agggcaacta cta 583

<210> 37
<211> 716
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(716)
<223> n = A,T,C or G

<400> 37
gatctactag tcatntggat tctatccatg gcagctaagc ctttctgaat ggattctact 60
gctttcttgt tctttaatcc agacccttat atatgtttat gttcacaggc agggcaatgt 120
ttagtgaaaa caattctaaa ttttttattt tgcattttca tgctaatttc cgtcacactc 180
cagcaggctt cctgggagaa taaggagaaa tacagctaaa gacattgtcc ctgcttactt 240
acagcctaat ggtatgcaaa accacttcaa taaagtaaca ggaaaagtac taaccaggta 300
gaatggacca aaactgatat agaaaaatca gaggaagaga ggaacaaata tttactgagt 360
cctagaatgt acaaggcttt ttaattacat attttatgta aggcctgcaa aaaacaggtg 420
agtaatcaac atttgtccca ttttacatat aaggaaactg aagcttaaat tgaataattt 480
aatgcataga ttttatagtt agaccatgtt caggtcccta tgttatactt actagctgta 540
tgaatatgag aaaataattt tgttattttc ttggcatcag tattttcatc tgcaaaataa 600
agctaaagtt atttagcaaa cagtcagcat agtgcctgat acatagtagg tgctccaaac 660
atgattacnc tantattngg tattanaaaa atccaatata ggcntggata aaaccg 716

<210> 38
<211> 688
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(688)
<223> n = A,T,C or G

<400> 38
ttctgtccac atatcatccc actttaattg ttaatcagca aaactttcaa tgaaaaatca 60
tccattttaa ccaggatcac accaggaaac tgaaggtgta ttttttttta ccttaaaaaa 120
aaaaaaaaaa accaaacaaa ccaaaacaga ttaacagcaa agagttctaa aaaatttaca 180
tttctcttac aactgtcatt cagagaacaa tagttcttaa gtctgttaaa tcttggcatt 240
aacagagaaa cttgatgaan agttgtactt ggaatattgt ggatttttt ttttgtctaa 300
tctcccccta ttgttttgcc aacagtaatt taagtttgtg tggaacatcc ccgtagttga 360
agtgtaaaca atgtatagga aggaatatat gataagatga tgcatcacat atgcattaca 420
tgtagggacc ttcacaactt catgcactca gaaaacatgc ttgaagagga ggagaggacg 480
gcccagggtc accatccagg tgccttgagg acagagaatg cagaagtggc actgttgaaa 540
tttagaagac catgtgtgaa tggtttcagg cctgggatgt ttgccaccaa gaagtgcctc 600
cgagaaattt ctttcccatt tggaatacag ggtggcttga tgggtacggt gggtgaccca 660
acgaagaaaa tgaaattctg ccctttcc 688

<210> 39
<211> 585
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(585)
<223> n = A,T,C or G

<400> 39
tagtagttgc cgcnnaccta aaanttggaa agcatgatgt ctaggaaaca tantaaaata 60
gggtatgcct atgtgctaca gagagatgtt agcatttaaa gtgcatantt ttatgtattt 120
tgacaaatgc atatncctct ataatccaca actgattacg aagctattac aattaaaaag 180
tttggccggg cgtggtgggc ggtggctgac gcctgtaatc ccagcacttt gggaggccga 240
ggcacgcgga tcacgaggtc gggagttcaa gaccatcctg gctaacacgg tgaaagtcca 300
tctctactaa aaatacgaaa aaattacccc ggcgtggtgg cgggcgcctg tagtcccagc 360
tactccggag gctgaggcag gagaatggcg tgaacccagg acacggagct tgcagtgtgc 420
caacatcacg tcactgccct ccagcctggg ggacaggaac aagantcccg tcctcanaaa 480
agaaaaatac tactnatant ttcnacttta ttttaantta cacagaactn cctcttggta 540
ccccccttacc attcatctca cccacctcct atagggcacn nctaa 585

<210> 40
<211> 475
<212> DNA
<213> Homo sapien

<400> 40
tctgtccaca ccaatcttag aagctctgaa aagaatttgt ctttaaatat cttttaatag 60
taacatgtat tttatggacc aaattgacat tttcgactgt tttttccaaa aaagtcaggt 120
gaatttcagc acactgagtt gggaatttct tatcccagaa gaccaaccaa tttcatattt 180
atttaagatt gattccatac tccgttttca aggagaatcc ctgcagtctc cttaaaggta 240
gaacaaatac ttcctatttt tttttcacca ttgtgggatt ggactttaag aggtgactct 300
aaaaaaacag agaacaaata tgtctcagtt gtattaagca cggacccata ttatcatatt 360
cacttaaaaa aatgatttcc tgtgcacctt ttggcaactt ctcttttcaa tgtagggaaa 420
aacttagtca ccctgaaaac ccacaaaata aataaaactt gtagatgtgg acaga 475

<210> 41
<211> 423
<212> DNA
<213> Homo sapien

<400> 41
taagagggta catcgggtaa gaacgtaggc acatctagag cttagagaag tctggggtag 60
gaaaaaaatc taagtattta taagggtata ggtaacattt aaaagtaggg ctagctgaca 120
ttatttagaa agaacacata cggagagata agggcaaagg actaagacca gaggaacact 180
aatatttagt gatcacttcc attcttggta aaaatagtaa cttttaagtt agcttcaagg 240
aagatttttg gccatgatta gttgtcaaaa gttagttctc ttgggtttat attactaatt 300
ttgttttaag atccttgtta gtgctttaat aaagtcatgt tatatcaaac gctctaaaac 360
attgtagcat gttaaatgtc acaatatact taccatttgt tgtatatggc tgtaccctct 420
cta 423

<210> 42
<211> 527
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(527)
<223> n = A,T,C or G

<400> 42
tctcctaggc taatgtgtgt gtttctgtaa aagtaaaaag ttaaaaattt taaaaataga 60
aaaaagctta tagaataaga atatgaagaa agaaaatatt tttgtacatt tgcacaatga 120
gtttatgttt taagctaagt gttattacaa aagagccaaa aaggttttaa aaattaaaac 180
gtttgtaaag ttacagtacc cttatgttaa tttataattg aagaaagaaa aacttttttt 240
tataaatgta gtgtagccta agcatacagt atttataaag tctggcagtg ttcaataatg 300
tcctaggcct tcacattcac tcactgactc acccagagca acttccagtc ctgtaagctc 360
cattcgtggt aagtgcccta tacaggtgca ccatttattt tacagtattt ttactgtacc 420
ttctctatgt ttccatatgt ttcgatatac aaataccact ggttactatn gcccnacagg 480
taattccagt aacacggcct gtatacgtct ggtancccta gngaaga 527

<210> 43
<211> 331
<212> DNA
<213> Homo sapien

<400> 43
tcttcaacct cgtaggacaa ctctcatatg cctgggcact atttttaggt tactaccttg 60
gctgcccttc tttaagaaaa aaaaaagaag aaaaaagaac ttttccacaa gtttctcttc 120
ctctagttgg aaaattagag aaatcatgtt tttaattttg tgttatttca gatcacaaat 180
tcaaacactt gtaaacatta agcttctgtt caatcccctg ggaagaggat tcattctgat 240
atttacggtt caaaagaagt tgtaatattg tgcttggaac acagagaacc agttattaac 300
ttcctactac tattatataa taaataataa c 331

<210> 44

<211> 592
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(592)
<223> n = A,T,C or G

<400> 44
ggcttagtag ttgccaggca aaatarcgtt gattctcctc aggagccacc cccaacaccc 60
ctgtttgctt ctagacctat acctagacta aagtcccagc agacccctag aggtgaggtt 120
cagagtgacc cttgaggaga tgtgctacac tagaaaagaa ctgcttgagt tttctaattt 180
atataagcag aaatctggag aagagtcata ggaatggata ttaagggtgt gagataatgg 240
cggaaggaat atagagttgg atcaggctgg acttattgat ttgaacccac taagtagaga 300
ttctgctttt gatgttgcag ctcagggagt taaaaaaggt tttaatggtt ctaatagttt 360
atttgcttgg ttagctgaaa tatggataaa agatggccca ctgtgagcaa gctggaaatg 420
cctgatctct ctcagtttaa tgtagaggaa gggatccaaa agtttaggga ganttggatg 480
ctggraktgg attggtcact ttgrgaccta cccwtcccag ctgggagggt ccagaagata 540
cacccttgac caacgctttg cgaaatggat ttgtgatggc ggcaactact aa 592

<210> 45
<211> 567
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(567)
<223> n = A,T,C or G

<400> 45
ggcttagtag ttgccattgc gagtgcttgc tcaacgagcg ttgaacatgg cggattgtct 60
agattcaacg gatttgagtt ttaccagcaa agcgaaccaa gcgcggccca gagaattatg 120
ggttggttgg ctttgaaaag atggaaatcc tgtaggccta gtcagaaaag ccttcttgca 180
gaacagttgg ttctcgggcg aacgctcatc aagatgccca ttggaaaggc tagcgtgtat 240
ttgggagagc ctgatagcgt gtcttctgat gatgtttgtg cttggacagt gacaaaagat 300
atgcaaagca agtccgaact agacgtcaag cttcgtgagc aaattattgt agactcctac 360
ttatactgtg aggaatgata gccaagggtg gggactttaa gactaaggtg gtttgtactt 420
gcgccgatga tcccaggcag aaagamctga tcgctagttt tatacgggca actactaagc 480
cgaattccag cacactggcg gccgttacta attggatccg anctcggtac cagcttgatg 540
catascttga gttwtctata ntgtcnc 567

<210> 46
<211> 908
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(908)

<223> n = A,T,C or G

<400> 46

gagcgaaaga ccgagggcag ngnntangng cgangaagcg gagagggcca aaaagcaacc 60
gctttccccg gggggtgccg attcattaag gcaggtggag gacaggtttc ccgatggaag 120
gcggcagggg cgcaagcaat taatgtgagt aggccattca ttagcacccg ggcttaacat 180
ttaagcttcg ggttggtatg tggtgggaat tgtgagcgga taacaatttc acacaggaaa 240
cagctatgac catgattacg ccaagctatt taggtgacat tatagaataa ctcaagttat 300
gcatcaagct tggtaccgag ttcggatcca ctagtaacgg ccgccagtgt gtggaattcg 360
gcttagtagt tgccgaccat ggagtgctac ctaggctaga atacctgagy tcctccctag 420
cctcactcac attaaattgt atcttttcta cattagatgt cctcagcgcc ttatttctgc 480
tggacwatcg ataaattaat cctgatagga tgatagcagc agattaatta ctgagagtat 540
gttaatgtgt catccctcct atataacgta tttgcatttt aatggagcaa ttctggagat 600
aatccctgaa ggcaaaggaa tgaatcttga gggtgagaaa gccagaatca gtgtccagct 660
gcagttgtgg gagaaggtga tattatgtat gtctcagaag tgacaccata tgggcaacta 720
ctaagcccga attccagcac actggcgggc gttactaatg gatccgagct cggtaccaag 780
cttgatgcat agcttgagta tctatagtgt cactaaatag cctggcgtta tcatggtcat 840
agctgtttcc tgtgtgaaat tgttatccgc tcccaattcc ccccaccata cgagccggaa 900
cataaagt 908

<210> 47
<211> 480
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(480)
<223> n = A,T,C or G

<400> 47

tgccaacaag gaaagtttta aatttcccct tgaggattct tggtgatcat caaattcagt 60
ggtttttaag gttgttttct gtcaaataac tctaacttta agccaaacag tatatggaag 120
cacagataka atattacaca gataaaagag gagttgatct aaagtaraga tagttggggg 180
ctttaatttc tggaacctag gtctccccat cttcttctgt gctgaggaac ttcttggaag 240
cggggattct aaagttcttt ggaagacagt ttgaaaacca ccatgttgtt ctcagtacct 300
ttatttttaa aaagtaggtg aacattttga gagagaaaag ggcttggttg agatgaagtc 360
ccccccccc ctttttttt ttttagctga aatagatacc ctatgttnaa rgaarggatt 420
attatttacc atgccaytar scacatgctc tttgatgggc nyctccstac cctccttaag 480

<210> 48
<211> 591
<212> DNA
<213> Homo sapien

<400> 48

aagagggtac cgagtggaat ttccgcttca ctagtctggt gtggctagtc ggtttcgtgg 60
tggccaacat tacgaacttc caactcaacc gttcttggac gttcaagcgg gagtaccggc 120
gaggatggtg gcgtgaattc tggcctttct ttgccgtggg atcggtagcc gccatcatcg 180
gtatgtttat caagatcttc tttactaacc cgacctctcc gatttacctg cccgagccgt 240
ggtttaacga ggggaggggg atccagtcac gcgagtactg gtcccagatc ttcgccatcg 300

Sub A1

Sub A1

tcgtgacaat gcctatcaac ttcgtcgtca ataagttgtg gaccttccga acggtgaagc 360
actccgaaaa cgtccggtgg ctgctgtgcg gtgactccca aaatcttgat aacaacaagg 420
taaccgaatc gcgctaagga accccggcat ctcgggtact ctgcatatgc gtacccctta 480
agccgaattc cagcacactg gcggccgtta ctaattggat ccgaactccg taaccaagcc 540
tgatgcgtaa cttgagttat tctatagtgt ccctaaaata acctggcgtt a 591

<210> 49
<211> 454
<212> DNA
<213> Homo sapien

<400> 49
aagagggtac ctgccttgaa atttaaatgt ctaaggaaar tgggagatga ttaagagttg 60
gtgtggcyta gtcacaccaa aatgtattta ttacatcctg ctcctttcta gttgacagga 120
aagaaagctg ctgtggggaa aggagggata aatactgaag ggatttacta aacaaatgtc 180
catcacagag ttttcctttt ttttttttg agacagagtc ttgctctgtc acccaggctg 240
gaatgaagwg gtatgatctc agttgaatgc aacctctacc tcctaggttc aagcgattct 300
catgcctcag cctcctgagc agctgggact ataggcgcat gctaccatgc caggctaatt 360
tttatatttt tattagagac ggggtgttgc catgttggcc aggcaggtct cgaactcctg 420
ggcctcagat gatctgcccc accgtaccct ctta 454

<210> 50
<211> 463
<212> DNA
<213> Homo sapien

<400> 50
aagagggtac caaaaaaaag aaaaaggaaa aaaagaaaaa caacttgtat aaggctttct 60
gctgcataca gctttttttt tttaaataaa tggtgccaac aaatgttttt gcattcacac 120
caattgctgg ttttgaaatc gtactcttca aaggtatttg tgcagatcaa tccaatagtg 180
atgccccgta ggttttgtgg actgcccacg ttgtctacct tctcatgtag gagccattga 240
gagactgttt ggacatgcct gtgttcatgt agccgtgatg tccgggggcc gtgtacatca 300
tgttaccgtg gggtggggtc tgcattggct gctgggcata tggctgggtg cccatcatgc 360
ccatctgcat ctgcataggg tattggggcg tttgatccat atagccatga ttgctgtggt 420
agccactgtt catcattggc tgggacatgc tgttaccctc tta 463

<210> 51
<211> 399
<212> DNA
<213> Homo sapien

<400> 51
cttcaacctc ccaaagtgct gggattacag gactgagcca ccacgctcag cctaagcctc 60
tttttcacta ccctctaagc gatctaccac agtgatgagg ggctaaagag cagtgcaatt 120
tgattacaat aatggaactt agatttatta attaacaatt tttccttagc atgttggttc 180
cataattatt aagagtatgg acttacttag aaatgagctt tcattttaag aatttcatct 240
ttgaccttct ctattagtct gagcagtatg acactatacg tattttattt aactaaccta 300
ccttgagcta ttacttttta aaaggctata tacatgaatg tgtattgtca actgtaaagc 360
cccacagtat ttaattatat catgatgtct ttgaggttg 399

<210> 52

<211> 392
<212> DNA
<213> Homo sapien

<400> 52
cttcaacctc aatcaacctt ggtaattgat aaaatcatca cttaactttc tgatataatg 60
gcaataatta tctgagaaaa aaaagtggtg aaagattaaa cttgcatttc tctcagaatc 120
ttgaaggata tttgaataat tcaaaagcgg aatcagtagt atcagccgaa gaaactcact 180
tagctagaac gttggaccca tggatctaag tccctgccct tccactaacc agctgattgg 240
ttttgtgtaa acctcctaca cgcttgggct tggtcgcctc atttgtcaaa gtaaaggctg 300
aaataggaag ataatgaacc gtgtcttttt ggtctctttt ccatccatta ctctgatttt 360
acaaagaggc ctgtattccc ctggtgaggt tg 392

<210> 53
<211> 179
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(179)
<223> n = A,T,C or G

<400> 53
ttcgggtgat gcctcctcag gctacagtga agactggatt acagaaaggt gccagcgaga 60
tttcagattc ctgtaaacct ctaaagaaaa ggagtcgcgc ctcaactgat gtagaaatga 120
ctagttcagc atacngagac acntctgact ccgattctag aggactgagt gacctgcan 179

<210> 54
<211> 112
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(112)
<223> n = A,T,C or G

<400> 54
ttcgggtgat gcctcctcag gctacatcat natagaagca aagtagaana atcnngtttg 60
tgcatttttc cacanacaaa attcaaatga ntggaagaaa ttggganagt at 112

<210> 55
<211> 225
<212> DNA
<213> Homo sapien

<400> 55
tgagcttccg cttctgacaa ctcaatagat aatcaaagga caactttaac agggattcac 60
aaaggagtat atccaaatgc caataaacat ataaaaagga attcagcttc atcatcatca 120
gaagwatgca aattaaaacc ataatgagaa accactatgt cccactagaa tagataaaat 180

cttaaaagac tggtaaaacc aagtgttggt aaggcaagag gagca 225

<210> 56
<211> 175
<212> DNA
<213> Homo sapien

<400> 56
gctcctcttg ccttaccaac acattctcaa aaacctgtta gagtcctaag cattctcctg 60
ttagtattgg gattttaccc ctgtcctata aagatgttat gtaccaaaaa tgaagtggag 120
ggccataccc tgagggaggg gagggatctc tagtgttgtc agaagcggaa gctca 175

<210> 57
<211> 223
<212> DNA
<213> Homo sapien

<400> 57
agccatttac cacccatgga tgaatggatt ttgtaattct agctgttgta ttttgtgaat 60
ttgttaattt tgttgttttt ctgtgaaaca catacattgg atatgggagg taaaggagtg 120
tcccagttgc tcctggtcac tccctttata gccattactg tcttgtttct tgtaactcag 180
gttaggtttt ggtctctctt gctccactgc aaaaaaaaaa aaa 223

<210> 58
<211> 211
<212> DNA
<213> Homo sapien

<400> 58
gttcgaaggt gaacgtgtag gtagcggatc tcacaactgg ggaactgtca aagacgaatt 60
aactgacttg gatcaatcaa atgtgactga ggaaacacct gaaggtgaag aacatcatcc 120
agtggcagac actgaaaata aggagaatga agttgaagag gtaaaagagg agggtccaaa 180
agagatgact ttggatgggt ggtaaatggc t 211

<210> 59
<211> 208
<212> DNA
<213> Homo sapien

<400> 59
gctcctcttg ccttaccaac tttgcaccca tcatcaacca tgtggccagg tttgcagccc 60
aggctgcaca tcaggggact gcctcgcaat acttcatgct gttgctgctg actgatggtg
120ctgtgacgga tgtggaagcc acacgtgagg ctgtggtgcg tgcctggaac ctgcccatgt 180
cagtgatcat tatgggtggt aaatggct 208

<210> 60
<211> 171
<212> DNA
<213> Homo sapien

<400> 60

Sub A1

agccatttac cacccatact aaattctagt tcaaactcca acttcttcca taaaacatct 60
aaccactgac accagttggc aatagcttct tccttcttta acctcttaga gtatttatgg 120
tcaatgccac acatttctgc aactgaataa agttggtaag gcaagaggag c 171

<210> 61
<211> 134
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(134)
<223> n = A,T,C or G

<400> 61
cgggtgatgc ctcctcaggc tttggtgtgt ccactcnact cactggcctc ttctccagca 60
actggtgaan atgtcctcan gaaaancncc acacgcngct cagggtgggg tgggaancat 120
canaatcatc nggc 134

<210> 62
<211> 145
<212> DNA
<213> Homo sapien

<400> 62
agagggtaca tatgcaacag tatataaagg aagaagtgca ctgagaggaa cttcatcaag 60
gccatttaat caataagtga tagagtcaag gctcaaccca ggtgtgacgg attccaggtc 120
ccaagctcct tactggtacc ctctt 145

<210> 63
<211> 297
<212> DNA
<213> Homo sapien

<400> 63
tgcactgaga ggaattcaaa gggtttatgc caaagaacaa accagtcctc tgcagcctaa 60
ctcatttgtt tttgggctgc gaagccatgt agagggcgat caggcagtag atggtccctc 120
ccacagtcag cgccatggtg gtccggtaaa gcatttggtc aggcaggcct cgtttcaggt 180
agacgggcac acatcagctt tctggaaaaa cttttgtagc tctggagctt tgtttttccc 240
agcataatca tacactgtgg aatcggaggt cagtttagtt ggtaaggcaa gaggagc 297

<210> 64
<211> 300
<212> DNA
<213> Homo sapien

<400> 64
gcactgagag gaacttccaa tactatgttg aataggagtg gtgagagagg gcatccttgt 60
cttgtgccgg ttttcaaagg gaatgcttcc agcttttgcc cattcagtat aatattaaag 120
aatgttttac cattttctgt cttgcctgtt tttctgtgtt tttgttggtc tcttcattct 180
ccatttttag gcctttacat gttaggaata tatttctttt aatgatactt caccttttggt 240

atcttttgtg agacttctact catagtgtga taagcactgg gttggtaagg caagaggagc 300

<210> 65
<211> 203
<212> DNA
<213> Homo sapien

<400> 65
gctcctcttg ccttaccaac tcacccagta tgtcagcaat tttatcrgct ttacctacga 60
aacagcctgt atccaaacac ttaacacact cacctgaaaa gttcaggcaa caatcgcctt 120
ctcatgggtc tctctgctcc agttctgaac ctttctcttt tcctagaaca tgcatttarg 180
tcgatagaag ttcctctcag tgc 203

<210> 66
<211> 344
<212> DNA
<213> Homo sapien

<400> 66
tacggggacc cctgcattga gaaagcgaga ctcactctga agctgaaatg ctgttgccct 60
tgcagtgctg gtagcaggag ttctgtgctt tgtgggctaa ggctcctgga tgacccctga 120
catggagaag gcagagttgt gtgccccttc tcatggcctc gtcaaggcat catggactgc 180
cacacacaaa atgccgtttt tattaacgac atgaaattga aggagagaac acaattcact 240
gatgtggctc gtaaccatgg atatggtcac atacagaggt gtgattatgt aaaggttaat 300
tccacccacc tcatgtggaa actagcctca atgcaggggt ccca 344

<210> 67
<211> 157
<212> DNA
<213> Homo sapien

<400> 67
gcactgagag gaacttcgta gggaggttga actggctgct gaggaggggg aacaacaggg 60
taaccagact gatagccatt ggatggataa tatggtggtt gaggagggac actacttata 120
gcagagggtt gtgtatagcc tgaggaggca tcacccg 157

<210> 68
<211> 137
<212> DNA
<213> Homo sapien

<400> 68
gcactgagag gaacttctag aaagtgaaag tctagacata aaataaaata aaaatttaaa 60
actcaggaga gacagcccag cacggtggct cacgcctgta atcccagaac tttgggagcc 120
tgaggaggca tcacccg 137

<210> 69
<211> 137
<212> DNA
<213> Homo sapien

<400> 69
cgggtgatgc ctcctcaggc tgtattttga agactatcga ctggacttct tatcaactga 60
agaatccgtt aaaaatacca gttgtattat ttctacctgt caaaatccat ttcaaatgtt 120
gaagttcctc tcagtgc 137

<210> 70
<211> 220
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(220)
<223> n = A,T,C or G

<400> 70
agcatgttga gcccagacac gcaatctgaa tgagtgtgca cctcaagtaa atgtctacac 60
gctgcctggt ctgacatggc acaccatcnc gtggagggca casctctgct cngcctacwa 120
cgagggcant ctcatwgaca ggttccaccc accaaactgc aagaggctca nnaagtactr 180
ccagggtmya sggacmasgg tgggaytyca ycacwcatct 220

<210> 71
<211> 353
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(353)
<223> n = A,T,C or G

<400> 71
cgttagggtc tctatccact gctaaaccat acacctgggt aaacagggac catttaacat 60
tcccanctaa atatgccaag tgacttcaca tgtttatctt aaagatgtcc aaaacgcaac 120
tgattttctc ccctaaacct gtgatggtgg gatgattaan cctgagtggt ctacagcaag 180
ttaagtgcaa ggtgctaaat gaangtgacc tgagatacag catctacaag gcagtacctc 240
tcaacncagg gcaactttgc ttctcanagg gcatttagca gtgtctgaag taatttctgt 300
attacaactc acggggcggg gggtgaatat ctantggana gnagacccta acg 353

<210> 72
<211> 343
<212> DNA
<213> Homo sapien

<400> 72
gcactgagag gaacttccaa tacyatkatc agagtgaaca rgcarccyac agaacaggag 60
aaaatgttyg caatctctcc atctgacaaa aggctaatat ccagawtcta awaggaactt 120
aaacaaattt atgagaaaag aacaracaac ctcawcaaaa agtgggtgaa ggawatgcts 180
aaargaagac atytattcag ccagtaaaca yatgaaaaaa aggctcatsa tcactgawca 240
ttagagaaat gcaaatcaaa accacaatga gataccatct yayrccagtt agaayggtga 300
tcattaaaar stcaggaaac aacagatgct ggacaaggtg tca 343

<210> 73
<211> 321
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(321)
<223> n = A,T,C or G

<400> 73
gcactgagag gaacttcaga gagagagaga gagttccacc ctgtacttgg ggagagaaac 60
agaaggtgag aaagtctttg gttctgaagc agcttctaag atcttttcat ttgcttcatt 120
tcaaagttcc catgctgcca aagtgccatc ctttggggta ctgttttctg agctccagtg 180
ataactcatt tatacaaggg agatacccag aaaaaaagtg agcaaatctt aaaaaggtgg 240
cttgagttca gccttaaata ccatcttgaa atgacacaga gaaagaanga tgttgggtgg 300
gagtggatag agaccctaac g 321

<210> 74
<211> 321
<212> DNA
<213> Homo sapien

<400> 74
gcactgagag gaacttcaga gagagagaga gagttccacc ctgtacttgg ggagagaaac 60
agaaggtgag aaagtctttg gttctgaagc agcttctaag atcttttcat ttgcttcatt 120
tcaaagttcc catgctgcca aagtgccatc ctttggggta ctgttttctg agctccagtg 180
ataactcatt tatacaaggg agatacccag aaaaaaagtg agcaaatctt aaaaaggtgg 240
cttgagttca gycttaaata ccatcttgaa atgamacaga gaaagaagga tgttgggtgg 300
gagtggatag agaccctaac g 321

<210> 75
<211> 317
<212> DNA
<213> Homo sapien

<400> 75
gcactgagag gaacttccac atgcactgag aaatgcatgt tcacaaggac tgaagtctgg 60
aactcagttt ctcagttcca atcctgattc aggtgtttac cagctacaca accttaagca 120
agtcagataa ccttagcttc ctcatatgca aaatgagaat gaaaagtact catcgctgaa 180
ttgttttgag gattagaaaa acatctggca tgcagtagaa attcaattag tattcatttt 240
cattcttcta aattaaacaa ataggatttt tagtggtgga acttcagaca ccagaaatgg 300
gagtggatag agaccct 317

<210> 76
<211> 244
<212> DNA
<213> Homo sapien

<400> 76

cgttagggtc tctatccact cccactactg atcaaactct atttatttaa ttatttttat 60
catactttaa gttctgggat acacgtgcag catgcgcagg tttgttgcat aggtatacac 120
ttgccatggt ggtttgctgc acccatcagt ccatcatcta cattaggtat ttctcctaat 180
gctatccctc ccctagcccc ttacaccccc aacaggctct agtgtgtgaa gttcctctca 240
gtgc 244

<210> 77
<211> 254
<212> DNA
<213> Homo sapien

<400> 77
cgttagggtc tctatccact gaaatctgaa gcacaggagg aagagaagca gtyctagtga 60
gatggcaagt tcwtttacca cactctttaa catttygttt agttttaacc tttatttatg 120
gataataaag gttaatatta ataatgattt attttaaggc attcccraat ttgcataatt 180
ctccttttgg agataccctt ttatctccag tgcaagtctg gatcaaagtg atasamagaa 240
gttcctctca gtgc 254

<210> 78
<211> 355
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(355)
<223> n = A,T,C or G

<400> 78
ttcgatacag gcaaacatga actgcaggag ggtggtgacg atcatgatgt tgccgatggt 60
ccggatggnc acgaagacgc actggancac gtgcttacgt ccttttgctc tgttgatggc 120
cctgagggga cgcaggaccc ttatgaccct cagaatcttc acaacgggag atggcactgg 180
attgantccc antgacacca gagacacccc aaccaccagn atatcantat attgatgtag 240
ttcctgtaga nggccccctt gtggaggaaa gctccatnag ttggtcatct tcaacaggat 300
ctcaacagtt tccgatggct gtgatgggca tagtcatant taaccntgtn tcgaa 355

<210> 79
<211> 406
<212> DNA
<213> Homo sapien

<400> 79
taagagggta ccagcagaaa ggttagtatc atcagatagc atcttatacg agtaatatgc 60
ctgctatttg aagtgtaatt gagaaggaaa attttagcgt gctcactgac ctgcctgtag 120
ccccagtgac agctaggatg tgcattctcc agccatcaag agactgagtc aagttgttcc 180
ttaagtcaga acagcagact cagctctgac attctgattc gaatgacact gttcaggaat 240
cggaatcctg tcgattagac tggacagctt gtggcaagtg aatttgcctg taacaagcca 300
gatttttaa aatttatatt gtaaataatg tgtgtgtgtg tgtgtgtata tatatatata 360
tgtacagtta tctaagttaa tttaaaagtt gtttggtacc ctctta 406

<210> 80

<211> 327
<212> DNA
<213> Homo sapien

<400> 80
ttttttttt tttactcggc tcagtctaat ccttttgta gtcactcata ggccagactt 60
agggctagga tgatgattaa taagagggat gacataacta ttagtggcag gttagttgtt 120
tgtagggctc atggtagggg taaaaggagg gcaatttcta gatcaaataa taagaaggta 180
atagctacta agaagaattt tatggagaaa gggacgcggg cgggggatat agggtcgaag 240
ccgcactcgt aaggggtgga tttttctatg tagccgttga gttgtggtag tcaaaatgta 300
ataattatta gtagtaagcc taggaga 327

<210> 81
<211> 318
<212> DNA
<213> Homo sapien

<400> 81
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caataaatat taacacagtc tacatttatt tggtgaatat tgcatatctg ctgtactgaa 240
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cctctacata tttaccacaa cacaatgggg ctcactcacc caccacatta acaacataaa 240
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tgaggtggat tcacgagttg cggacaactc ctttgatgcc aagcgaggtg cagccggaga 180
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Sub A1

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<210> 133
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<210> 136
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aggtagcaca gcaaatccac ccaggatc 9388

<210> 142
<211> 419

<212> DNA
<213> Homo sapien

<400> 142
tgtaagtcga gcagtgtgat ggaaggaatg gtctttggag agagcatatc catctcctcc 60
tcactgcctc ctaatgtcat gaggtacact gagcagaatt aaacagggta gtcttaacca 120
cactattttt agctaccttg tcaagctaat ggttaaagaa cacttttggt ttacacttgt 180
tgggtcatag aagttgcttt ccgccatcac gcaataagtt tgtgtgtaat cagaaggagt 240
taccttatgg tttcagtgtc attctttagt taacttggga gctgtgtaat ttaggctttg 300
cgtattattt cacttctgtt ctccacttat gaagtgattg tgtgttcgcg tgtgtgtgcg 360
tgcgcatgtg cttccggcag ttaacataag caaataccca acatcacact gctcgactt 419

<210> 143
<211> 402
<212> DNA
<213> Homo sapien

<400> 143
tgtaagtcga gcagtgtgat gtccactgca gtgtgttgct gggaacagtt aatgagcaaa 60
ttgtatacaa tggctagtac attgaccggg atttgttgaa gctggtgagt gttatgactt 120
agcctgttag actagtctat gcacatggct ctggtcaact accgctctct catttctcca 180
gataaatccc ccatgcttta tattctcttc caaacatact atcctcatca ccacatagtt 240
cctttgttaa tgctttgttc tagactttcc cttttctgtt ttcttattca aacctatatc 300
tctttgcata gattgtaaat tcaaatgccc tcagggtgca ggcagttcat gtaagggagg 360
gaggctagcc agtgagatct gcatcacact gctcgactta ca 402

<210> 144
<211> 224
<212> DNA
<213> Homo sapien

<400> 144
tcgggtgatg cctcctcagg ccaagaagat aaagcttcag acccctaaca catttccaaa 60
aaggaagaaa ggagaaaaaa gggcatcatc cccgttccga agggtcaggg aggaggaaat 120
tgaggtggat tcacgagttg cggacaactc ctttgatgcc aagcgaggtg cagccggaga 180
ctggggagag cgagccaatc aggttttgaa gttcctctca gtgc 224

<210> 145
<211> 111
<212> DNA
<213> Homo sapien

<400> 145
agccatttac cacccatcca caaaaaaaaa aaaaaaaaag aaaaatatca aggaataaaa 60
atagactttg aacaaaaagg aacatttgct ggcctgagga ggcatcaccc g 111

<210> 146
<211> 585
<212> DNA
<213> Homo sapien

<400> 146
tagcatgttg agcccagaca cttgtagaga gaggaggaca gttagaagaa gaagaaaagt 60
ttttaaatgc tgaaagttac tataagaaag ctttggcttt ggatgagact tttaaagatg 120
cagaggatgc tttgcagaaa cttcataaat atatgcaggt gattccttat ttcctcctag 180
aaatttagtg atatttgaaa taatgcccaa acttaatttt ctcctgagga aaactattct 240
acattactta agtaaggcat tatgaaaagt ttctttttag gtatagtttt tcctaattgg 300
gtttgacatt gcttcatagt gcctctgttt ttgtccataa tcgaaagtaa agatagctgt 360
gagaaaacta ttacctaaat ttggtatgtt gttttgagaa atgtccttat agggagctca 420
cctggtggtt tttaaatttat tgttgctact ataattgagc taattataaa aacctttttg 480
agacatattt taaattgtct tttcctgtaa tactgatgat gatgttttct catgcatttt 540
cttctgaatt gggaccattg ctgctgtgtc tgggctcaca tgcta 585

<210> 147
<211> 579
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(579)
<223> n = A,T,C or G

<400> 147
tagcatgttg agcccagaca ctgggcagcg ggggtggcca cggcagctcc tgccgagccc 60
aagcgtgttt gtctgtgaag gaccctgacg tcacctgcca ggctagggag gggtcaatgt 120
ggagtgaatg ttcaccgact ttcgcaggag tgtgcagaag ccaggtgcaa cttggtttgc 180
ttgtgttcat caccctcaa gatatgcaca ctgctttcca aataaagcat caactgtcat 240
ctccagatgg ggaagacttt ttctccaacc agcaggcagg tccccatcca ctcagacacc 300
agcacgtcca ccttctcggg cagcaccacg tcctccacct tctgctggta cacggtgatg 360
atgtcagcaa agccgttctg cangaccagc tgccccgtgt gctgtgccat ctcactggcc 420
tccaccgcgt acaccgctct aggccgcgca tantgtgcac agaanaaatg atgatccagt 480
cccacagccc acgtccaaga ngactttatc cgtcagggat tctttattct gcaggatgac 540
ctgtggtatt aattgttcgt gtctgggctc aacatgcta 579

<210> 148
<211> 249
<212> DNA
<213> Homo sapien

<400> 148
tgacaccttg tccagcatct gcaagccagg aagagagtcc tcaccaagat ccccaccccg 60
ttggcaccag gatcttggac ttccaatctc cagaactgtg agaaataagt atttgtcgct 120
aaataaatct ttgtggtttc agatatttag ctatagcaga tcaggctgac taagagaaac 180
cccataagag ttacatactc attaatctcc gtctctatcc ccaggtctca gatgctggac 240
aaggtgtca 249

<210> 149
<211> 255
<212> DNA
<213> Homo sapien

<400> 149
tgacaccttg tccagcatct gctattttgt gacttttaa taatagccat tctgactggt 60
gtgagatggt aactcattgt gggtttggtc tgcatttctc taatgatcag tgatattaag 120
ctttttttaa atatgcttgt tgaccacatg tatatcatct tttgagaagt gtctgttcat 180
atcctttgcc cacttttaa tttttttatc ttgtaaattt gtttaatttc cttacagatg 240
ctggacaagg tgtca 255

<210> 150
<211> 318
<212> DNA
<213> Homo sapien

<400> 150
ttacgctgca acactgtgga ggccaagctg ggatcacttc ttcattctaa ctggagagga 60
gggaagttca agtccagcag agggtgggtg ggtagacagt ggcactcaga aatgtcagct 120
ggacccctgt ccccgcatag gcaggacagc aaggctgtgg ctctccaggg ccagctgaag 180
aacaggacac tgtctccgct gccacaaagc gtcagagact cccatctttg aagcacggcc 240
ttcttggtct tcctgcactt ccctgttctg ttagagacct ggttatagac aaggcttctc 300
cacagtgttg cagcgtaa 318

<210> 151
<211> 323
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(323)
<223> n = A,T,C or G

<400> 151tnacgcngcn acnntgtaga ganggnaagg cnttccccac attnccccctt
catnanagaa 60
ttattcnacc aagnntgacc natgccnttt atgacttaca tgcnnactnc ntaatctgtn 120
tcnngcctta aaagcnnntc cactacatgc ntcancactg tntgtgtnac ntcatnaact 180
gtcngnaata ggggcncata actacagaaa tgcanttcat actgcttcca ntgccatcng 240
cgtgtggcct tncctactct tcttntattc caagtagcat ctctggantg cttccccact 300
ctccacattg ttgcagcnat aat 323

<210> 152
<211> 311
<212> DNA
<213> Homo sapien

<400> 152
tcaagattcc ataggctgac cagtccaagg agagttgaaa tcatgaagga gagtctatct 60
ggagagagct gtagttttga gggttgcaaa gacttaggat ggagttggtg ggtgtggtta 120
gtctctaagg ttgattttgt tcataaattt catgccctga atgccttgct tgcctcaccc 180
tggtccaagc cttagtgaac acctaaaagt ctctgtcttc ttgctctcca aacttctcct 240
gaggatttcc tcagattgtc tacattcaga tcgaagccag ttggcaaaca agatgcagtc 300
cagagggtca g 311

<210> 153
<211> 332
<212> DNA
<213> Homo sapien

<400> 153
caagattcca taggctgacc aggaggctat tcaagatctc tggcagttga ggaagtctct 60
ttaagaaaat agtttaaaca atttgttaaa atttttctgt cttacttcat ttctgtagca 120
gttgatatct ggctgtcctt tttataatgc agagtgggaa ctttccctac catgtttgat 180
aaatgttgtc caggctccat tgccaataat gtgttgtcca aaatgcctgt ttagttttta 240
aagacggaac tccacccttt gcttggtctt aagtatgtat ggaatgttat gataggacat 300
agtagtagcg gtggtcagcc tatggaatct tg 332

<210> 154
<211> 345
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(345)
<223> n = A,T,C or G

<400> 154
tcaagattcc ataggctgac ctggacagag atctcctggg tctggcccag gacagcaggc 60
tcaagctcag tggagaaggt ttccatgacc ctcagattcc cccaaacctt ggattgggtg 120
acattgcatc tcctcagaga gggaggagat gtangtctgg gcttccacag ggacctggta 180
ttttaggatc agggtaccgc tggcctgagg ctttggatcat tcanagcctg ggggtggaat 240
ggctggcagc ctgtggcccc attgaaatag gctctggggc actccctctg ttcctanttg 300
aacttgggta aggaacagga atgtggtcan cctatggaat cttga 345

<210> 155
<211> 295
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(295)
<223> n = A,T,C or G

<400> 155
gacgcttggc cacttgacac attaaacagt tttgcataat cactancatg tatttctagt 60
ttgctgtctg ctgtgatgcc ctgccctgat tctctggcgt taatgatggc aagcataatc 120
aaacgctgtt ctgttaattc caagttataa ctggcattga ttaaagcatt atctttcaca 180
actaaactgt tcttcatana acagcccata ttattatcaa attaagagac aatgtattcc 240
aatatccttt anggccaata tatttnatgt cccttaatta agagctactg tccgt 295

<210> 156
<211> 406
<212> DNA

<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(406)
<223> n = A,T,C or G

<400> 156
gacgcttggc cacttgacac tgcagtggga aaaccagcat gagccgctgc ccccaaggaa 60
cctcgaagcc caggcagagg accagccatc ccagcctgca ggtaaagtgt gtcacctgtc 120
aggtgggctt ggggtgagtg ggtgggggaa gtgtgtgtgc aaaggggtg tnaatgtnta 180
tgcgtgtgag catgagtgat ggctagtgtg actgcatgtc agggagtgtg aacaagcgtg 240
cgggggtgtg tgtgcaagtg cgtatgcata tgagaatatg tgtctgtgga tgagtgcatt 300
tgaaagtctg tgtgtgtgcg tgtggtcatg anggtaantt antgactgcg caggatgtgt 360
gagtgtgcat ggaacactca ntgtgtgtgt caagtggccn ancgtc 406

<210> 157
<211> 208
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(208)
<223> n = A,T,C or G

<400> 157
tgacgcttgg ccacttgaca cactaaaggg tgttactcat cactttcttc tctcctcggt 60
ggcatgtgag tgcatctatt cacttggcac tcatttgttt ggcagtgact gtaanccana 120
tctgatgcat acaccagctt gtaaattgaa taaatgtctc taatactatg tgctcacaat 180
anggtanggg tgaggagaag gggagaga 208

<210> 158
<211> 547
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(547)
<223> n = A,T,C or G

<400> 158
cttcaacctc cttcaacctc cttcaacctc ctggattcaa acaatcatcc cacctcagac 60
tccttagtag ctgagactac agactcacgc cactacatct ggctaaattt ttgtagagat 120
agggtttcat catgttgccc tggctggtct caaactcctg acctcaagca atgtgcccac 180
ctcagcctcc caaagtgctg ggattacagg cataagccac catgcccagt ccatntttaa 240
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ttatgataca attgcccaca gtattaagac agtaacatgc tgcacaggtt tgtagcctag 360
gaacagtagg caataccaca tagcttaggt gtgtggtaga ctataccatc taggtttgtg 420
taagttacac tttatgctgt ttacacaatg acaaaaccat ctaatgatgc atttctcaga 480

atgtatcctt gtcagtaagc tatgatgtac agggaacact gcccaaggac acagatattg 540
tacctgt 547

<210> 159
<211> 203
<212> DNA
<213> Homo sapien

<400> 159
gctcctcttg ccttaccaac tcacccagta tgtcagcaat tttatcrgct ttacctacga 60
aacagcctgt atccaaacac ttaacacact cacctgaaaa gttcaggcaa caatcgcctt 120
ctcatgggtc tctctgctcc agttctgaac ctttctcttt tcctagaaca tgcatttarg 180
tcgatagaag ttcctctcag tgc 203

<210> 160
<211> 402
<212> DNA
<213> Homo sapien

<400> 160
tgtaagtcga gcagtgtgat gggtggaaca gggttgtaag cagtaattgc aaactgtatt 60
taaacaataa taataatatt tagcatttat agagcacttt atatcttcaa agtacttgca 120
aacattayct aattaaatac cctctctgat tataatctgg atacaaatgc acttaaactc 180
aggacagggt catgagaraa gtatgcattt gaaagttggt gctagctatg ctttaaaaac 240
ctatacaatg atgggraagt tagagttcag attctgttgg actgtttttg tgcatttcag 300
ttcagcctga tggcagaatt agatcatatc tgcactcgat gactytgctt gataacttat 360
cactgaaatc tgagtgttga tcatcacact gctcgactta ca 402

<210> 161
<211> 193
<212> DNA
<213> Homo sapien

<400> 161
agcatgttga gcccagacac tgaccaggag aaaaaccaac caatagaaac acgcccagac 60
actgaccagg agaaaaacca accaataaaa acaggcccgg acataagaca aataataaaa 120
ttagcggaca aggacatgaa aacagctatt gtaagagcgg atatagtggt gtgtgtctgg 180
gctcaacatg cta 193

<210> 162
<211> 147
<212> DNA
<213> Homo sapien

<400> 162
tgttgagccc agacactgac caggagaaaa accaaccaat aaaaacaggc ccggacataa 60
gacaaataat aaaattagcg gacaaggaca tgaaaacagc tattgtaaga gcggatatag 120
tggtgtgtgt ctgggctcaa catgcta 147

<210> 163
<211> 294

<212> DNA
<213> Homo sapien

<400> 163
tagcatgttg agcccagaca caaatctttc cttaagcaat aaatcatttc tgcatatgtt 60
tttaaaacca cagctaagcc atgattattc aaaaggacta ttgtattggg tattttgatt 120
tgggttctta tctccctcac attatcttca tttctatcat tgacctctta tcccagagac 180
tctcaaactt ttatgttata caaatcacat tctgtctcaa aaaatatctc acccacttct 240
cttctgtttc tgcgtgtgta tgtgtgtgtg tgtgtgtctg ggctcaacat gcta 294

<210> 164
<211> 412
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(412)
<223> n = A,T,C or G

<400> 164
cgggattggc tttgagctgc agatgctgcc tgtgaccgca cccggcgtgg aacagaaagc 60
cacctggctg caagtgcgcc agagccgccc tgactacgtg ctgctgtggg gctggggcgt 120
gatgaactcc accgccctga aggaagccca ggccaccgga tacccccgcg acaagatgta 180
cggcgtgtgg tgggccggtg cggagcccga tgtgcgtgac gtgggcgaag gcgccaaggg 240
ctacaacgcg ctggctctga acggctacgg cacgcagtcc aaggtgatcc angacatcct 300
gaaacacgtg cacgacaagg gccagggcac ggggcccaaa gacgaagtgg gctcggtgct 360
gtacacccgc ggcgtgatca tccagatgct ggacaaggtg tcaatcacta at 412

<210> 165
<211> 361
<212> DNA
<213> Homo sapien

<400> 165
ttgacacctt gtccagcatc tgcatctgat gagagcctca gatggctacc actaatggca 60
gaaggcaaag gagaacaggc attgtatggc aagaaaggaa gaaagaggaga ggggagaaag 120
gtgctaggtt cttttcaaca accagttctt gatggaactg agagtaagag ctcaaggcca 180
ggtgtggtga ctccaaccag taatcccaac attttaggag gctgaggcag gcagatgtct 240
tgaccccatg agtttgtgac cagcctgaac aacatcatga gactccatct ctacaataat 300
tacaaaaatt aatcaggcat tgtggtatgc cctgtagtcc cagatgctgg acaaggtgtc 360
a 361

<210> 166
<211> 427
<212> DNA
<213> Homo sapien

<400> 166
twgactgact catgtcccct acacccaact atcttctcca ggtggccagg catgatagaa 60
tctgatcctg acttagggga atattttctt tttacttccc atcttgattc cctgccggtg 120

agtttcctgg ttcagggtaa gaaaggagct caggccaaag taatgaacaa atccatcctc 180
acagacgtac agaataagag aacwtggacw tagccagcag aacmcaaktg aaamcagaac 240
mcttamctag gatracaamc mcrraratar ktgcycmcmc wtataataga aaccaaactt 300
gtatctaatt aaatatttat ccacygtcag ggcattagtg gttttgataa atacgctttg 360
gctaggattc ctgaggttag aatggaaraa caattgcamc gagggtaggg gacatgagtc 420
aktctaa 427

<210> 167
<211> 500
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(500)
<223> n = A,T,C or G

<400> 167
aacgtcgcat gctcccggcc gccatggccg cgggatagac tgactcatgt cccctaagat 60
agaggagaca cctgctaggt gtaaggagaa gatggttagg tctacggagg ctccagggtg 120
ggagtagttc cctgctaagg gagggtagac tgttcaacct gttcctgctc cggcctccac 180
tatagcagat gcgagcagga gtaggagaga gggaggtaag agtcagaagc ttatgttgtt 240
tatgcgggga aacgccrtat cgggggcagc cragttatta ggggacantr tagwyartcw 300
agntagcatc caaagcgngg gagttntccc atatggttgg acctgcaggc ggccgcatta 360
gtgattagca tgtgagcccc agacacgcat agcaacaagg acctaaactc agatcctgtg 420
ctgattactt aacatgaatt attgtattta tttaacaact ttgagttatg aggcatatta 480
ttaggtccat attacctgga 500

<210> 168
<211> 358
<212> DNA
<213> Homo sapien

<400> 168
ttcatcgctc ggtgactcaa gcctgtaatc ccagaacttt gggaggccga ggggagcaga 60
tcacctgagg ttgggagttt gagaccagcc tggccaacat ggtgacaacc cgtctctgct 120
aaaaatacaa aaattagcca agcatggtgg catgcacttg taatcccagc tactcgggag 180
gctgaggcag gagaatcact tgaggccagg aggcagaggt tgcagtgagg cagaggttga 240
gatcatgcca ctgcactcca gcctgggcaa cagagtaaga ctccatctca aaaaaaaaaa 300
aaaaaaagaa tgatcagagc cacaaataca gaaaaccttg agtcaccgag cgatgaaa 358

<210> 169
<211> 1265
<212> DNA
<213> Homo sapien

<400> 169
ttctgtccac accaatctta gagctctgaa agaatttgtc tttaaatatc ttttaatagt 60
aacatgtatt ttatggacca aattgacatt ttcgactatt ttttcccaaa aaaagtcagg 120
tgaatttcag cacactgagt tgggaatttc ttatcccaga agwcggcacg agcaatttca 180
tatttattta agattgattc catactccgt tttcaaggag aatccctgca gtctccttaa 240

aggtagaaca aatactttct atttttttttt caccattgtg ggattggact ttaagaggtg 300
actctaaaaa aacagagaac aaatatgtct cagttgtatt aagcacggac ccatattatc 360
atattcactt aaaaaaatga tttcctgtgc acctttggc aacttctctt ttcaatgtag 420
ggaaaaactt agtcaccctg aaaacccaca aaataaataa aacttgtaga tgtgggcaga 480
argtttgggg gtggacattg tatgtgttta aattaaaccc tgtatcactg agaagctgtt 540
gtatgggtca gagaaaatga atgcttagaa gctgttcaca tcttcaagag cagaagcaaa 600
ccacatgtct cagctatatt attatttatt ttttatgcat aaagtgaatc atttcttctg 660
tattaatttc caaagggttt taccctctat ttaaatgctt tgaaaaacag tgcattgaca 720
atgggttgat atttttcttt aaaagaaaaa tataattatg aaagccaaga taatctgaag 780
cctgttttat tttaaaactt tttatgttct gtggttgatg ttgtttgttt gtttgtttct 840
attttgttgg ttttttactt tgtttttttgt tttgttttgt tttggtttdg catactacat 900
gcagtttctt taaccaatgt ctgtttggct aatgtaatta aagttgttaa tttatatgag 960
tgcatttcaa ctatgtcaat ggtttcttaa tatttattgt gtagaagtac tggtaatttt 1020
tttatttaca atatgtttaa agagataaca gtttgatatg ttttcatgtg tttatagcag 1080
aagttattta tttctatggc attccagcgg atattttggt gtttgcgagg catgcagtca 1140
atattttgta cagttagtgg acagtattca gcaacgcctg atagcttctt tggccttatg 1200
ttaaataaaa agacctgttt gggatgtaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1260
aaaaa 1265

<210> 170
<211> 383
<212> DNA
<213> Homo sapien

<400> 170
tgtaagtcga gcagtgtgat gacgatattc ttcttattaa tgtggtaatt gaacaaatga 60
tctgtgatac tgatcctgag ctaggaggcg ctgttcagtt aatgggactt cttcgtactc 120
taattgatcc agagaacatg ctggctacaa ctaataaaac cgaaaaaagt gaatttctaa 180
atttttttcta caaccattgt atgcatgttc tcacagcacc acttttgacc aatacttcag 240
aagacaaatg tgaaaaggat aatatagttg gatcaaacaa aaacaacaca atttgtcccg 300
ataattatca aacagcacag ctacttgcct taattttaga gttactcaca ttttgtgtgg 360
aacatcacac tgctcgactt aca 383

<210> 171
<211> 383
<212> DNA
<213> Homo sapien

<400> 171
tgggcacctt caatatcgca agttaaaaat aatgttgagt ttattatact tttgacctgt 60
ttagctcaac agggtgaagg catgtaaaga atgtggactt ctgaggaatt ttcttttaaa 120
aagaacataa tgaagtaaca ttttaattac tcaaggacta cttttggttg aagtttataa 180
tctagatacc tctacttttt gtttttgctg ttcgacagtt cacaaagacc ttcagcaatt 240
tacagggtaa aatcgttgaa gtagtggagg tgaaactgaa atttaaaatt attctgtaaa 300
tactataggg aaagaggctg agcttagaat cttttggttg ttcatgtgtt ctgtgctctt 360
atcatcacac tgctcgactt aca 383

<210> 172
<211> 699
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(699)
<223> n = A,T,C or G

<400> 172
tcgggtgatg cctcctcagg cttgtcgtta gtgtacacag agctgctcat gaagcgacag 60
cggctgcccc tggcacttca gaacctcttc ctctacactt ttggtgcgct tctgaatcta 120
ggtctgcatg ctggcggcgg ctctggccca ggcctcctgg aaagtttctc aggatgggca 180
gcactcgtgg tgctgagcca ggcactaaat ggactgctca tgtctgctgt catggagcat 240
ggcagcagca tcacacgcct ctttgtggtg tcctgctcgc tggtggtcaa cgccgtgctc 300
tcagcagtcc tgctacggct gcagctcaca gccgccttct tcctggccac attgctcatt 360
ggcctggcca tgcgcctgta ctatggcagc cgctagtccc tgacaacttc caccctgatt 420
ccggaccctg tagattgggc gccaccacca gatccccctc ccaggccttc ctccctctcc 480
catcagcggc cctgtaacaa gtgccttgtg agaaaagctg gagaagtgag ggcagccagg 540
ttattctctg gaggttggtg gatgaagggg taccctagg agatgtgaag tgtgggtttg 600
gttaaggaaa tgcttaccat cccccacccc caaccaagtt nttccagact aaagaattaa 660
ggtaacatca atacctaggc ctgaggaggc atcacccga 699

<210> 173
<211> 701
<212> DNA
<213> Homo sapien

<400> 173
tcgggtgatg cctcctcagg ccagatcaaa cttggggttg aaaactgtgc aaagaaatca 60
atgtcggaga aagaattttg caaaagaaaa atgcctaatc agtactaatt taataggtca 120
cattagcagt ggaagaagaa atgttgatat tttatgtcag ctattttata atcaccagag 180
tgcttagctt catgtaagcc atctcgtatt cattagaaat aagaacaatt ttattcgtcg 240
gaaagaactt ttcaatttat agcatcttaa ttgctcagga ttttaaattt tgataaagaa 300
agctccactt ttggcaggag taggggcag ggagagagga ggctccatcc acaaggacag 360
agacaccagg gccagtaggg tagctggtgg ctggatcagt cacaacggac tgacttatgc 420
catgagaaga aacaacctcc aaatctcagt tgcttaatac aacacaagct catttcttgc 480
tcacgttaca tgtcctatgt agatcaacag caggtgactc agggacccag gctccatctc 540
catatgagct tccatagtca ccaggacacg ggctctgaaa gtgtcctcca tgcagggaca 600
catgcctctt cctttcattg ggcagagcaa gtcacttatg gccagaagtc acactgcagg 660
gcagtgccat cctgctgtat gcctgaggag gcatcacccg a 701

<210> 174
<211> 700
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(700)
<223> n = A,T,C or G

<400> 174
tcgggtgatg cctcctcang cccctaaatc agagtccagg gtcagagcca caggagacag 60

ggaaagacat agattttaac cggccccctt caggagattc tgaggctcag ttcactttgt 120
tgcagtttga acagaggcag caaggctagt ggttaggggc acggtctcta aagctgcact 180
gcctggatct gcctcccagc tctgccagga accagctgcg tggccttgag ctgctgacac 240
gcagaaagcc ccctgtggac ccagtctcct cgtctgtaag atgaggacag gactctagga 300
acccttccc ttggtttggc ctcactttca caggctccca tcttgaactc tatctactct 360
tttcctgaaa ccttgtaaaa gaaaaaagtg ctagcctggg caacatggca aaaccctgtc 420
tctacaaaaa atacaaaaat tagttgggtg tggtggcatg tgcctgtagt cccagccact 480
tgggaggtgc tgaggtggga ggatcacttg agcccgggag gtggaggttg cagtgagcca 540
agatcatgcc actgcactcc agcctgagta atagagtaag actctgtctc aaaaacaaca 600
acaacaacag tgagtgtgcc tctgtttccg ggttggatgg ggcaccacat ttatgcatct 660
ctcagatttg gacgctgcag cctgaggagg catcacccga 700

<210> 175
<211> 484
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(484)
<223> n = A,T,C or G

<400> 175
tatagggcga attgggcccg agttgcatgn tcccggccgc catggccgcg ggattcgggt 60
gatgcctcct caggcttgtc tgccacaagc tacttctctg agctcagaaa gtgccccttg 120
atgagggaaa atgtcctact gcactgcgaa tttctcagtt ccattttacc tcccagtcct 180
ccttctaaac cagttaataa attcattcca caagtattta ctgattacct gcttgtgcca 240
gggactattc tcaggctgaa gaaggtggga ggggagggcg gaacctgagg agccacctga 300
gccagcttta tatttcaacc atggctggcc catctgagag catctcccca ctctcgccaa 360
cctatcgggg catagcccag ggatgccccc aggcggccca ggttagatgc gtccctttgg 420
cttgtcagtg atgacataca ccttagctgc ttagctggtg ctggcctgag gaggcatcac 480
ccga 484

<210> 176
<211> 432
<212> DNA
<213> Homo sapien

<400> 176
tcgggtgatg cctcctcagg gctcaaggga tgagaagtga cttctttctg gagggaccgt 60
tcatgccacc caggatgaaa atggataggg acccacttgg aggacttgct gatatgtttg 120
gacaaatgcc aggtagcgga attggtactg gtccaggagt tatccaggat agattttcac 180
ccaccatggg acgtcatcgt tcaaatcaac tcttcaatgg ccatggggga cacatcatgc 240
ctcccacaca atcgcagttt ggagagatgg gaggcaagtt tatgaaaagc caggggctaa 300
gccagctcta ccataaccag agtcagggac tcttatccca gctgcaagga cagtcgaagg 360
atatgccacc tcggttttct aagaaaggac agcttaatgc agatgagatt agcctgagga 420
ggcatcaccc ga 432

<210> 177
<211> 788
<212> DNA

<213> Homo sapien

<400> 177

tagcatgttg agcccagaca cagtagcatt tgtgccaatt tctggttgga atggtgacaa 60
catgctggag ccaagtgcta acatgccttg gttcaaggga tggaaagtca cccgtaagga 120
tggcaatgcc agtggaacca cgctgcttga ggctctggac tgcatcctac caccaactcg 180
cccaactgac aagcccttgc gcctgcctct ccaggatgtc tacaaaattg gtggtattgg 240
tactgttcct gttggccgag tggagactgg tgttctcaaa cccggtatgg tggtcacctt 300
tgctccagtc aacgttacaa cggaagtaaa atctgtcgaa atgcaccatg aagctttgag 360
tgaagctctt cctggggaca atgtgggctt caatgtcaag aatgtgtctg tcaaggatgt 420
tcgtcgtggc aacgttgctg gtgacagcaa aaatgaccca ccaatggaag cagctggctt 480
cactgctcag gtgattatcc tgaaccatcc aggccaaata agtgccggct atgcccctgt 540
attggattgc cacacggctc acattgcatg caagtttgct gagctgaagg aaaagattga 600
tcgccgttct ggtaaaaagc tggaagatgg ccctaaattc ttgaagtctg gtgatgctgc 660
cattgttgat atggttcctg gcaagcccat gtgtgttgag agcttctcag actatccacc 720
tttgggtcgc tttgctgttc gtgatatgag acagacagtt gcggtgggtg tctgggctca 780
acatgcta 788

<210> 178
<211> 786
<212> DNA
<213> Homo sapien

<400> 178

tagcatgttg agcccagaca cctgtgtttc tgggagctct ggcagtggcg gattcatagg 60
cacttgggct gcactttgaa tgacacactt ggctttatta gattcactag tttttaaaaa 120
attgttgttc gtttcttttc attaaaggtt taatcagaca gatcagacag cataatttg 180
tatttaatga cagaaacgtt ggtacatttc ttcatgaatg agcttgcatt ctgaagcaag 240
agcctacaaa aggcacttgt tataaatgaa agttctggct ctagaggcca gtactctgga 300
gtttcagagc agccagtgat tgttccagtc agtgatgcct agttatatag aggaggagta 360
cactgtgcac tcttctaggt gtaagggtat gcaactttgg atcttaaaat tctgtacaca 420
tacacacttt atatatatgt atgtatgtat gaaaacatga aattagtttg tcaaatatgt 480
gtgtgtttag tattttagct tagtgcaact atttccacat tatttattaa attgatctaa 540
gacactttct tgttgacacc ttgaatatta atgttcaagg gtgcaatgtg tattccttta 600
gattgttaaa gcttaattac tatgatttgt agtaaattaa cttttaaaat gtatttgagc 660
ccttctgtag tgtcgtaggg ctcttacagg gtgggaaaga ttttaatttt ccagttgcta 720
attgaacagt atggcctcat tatatatttt gatttatagg agtttgtgtc tgggctcaac 780
atgcta 786

<210> 179
<211> 796
<212> DNA
<213> Homo sapien

<400> 179

tagcatgttg agcccagaca ctggttacaa gaccagacct gcttcctcca tatgtaaaca 60
gcttttaaaa agccagtgaa ccttttttaat actttggcaa ccttctttca caggcaaaga 120
acacccccat ccgccccttg tttggagtgc agagtttggc tttggttctt tgccttgcct 180
ggagtatact tctaattcct gttgtcctgc acaagctgaa taccgagcta cccaccgcca 240
cccaggccag gtttccactc atttattact ttatgtttct gttccattgc tggtccacag 300
aaataagttt tcctttggag gaatgtgatt atacccctttt aatttcctcc ttttgctttt 360

ttttaatatc attggtatgt gtttggccca gaggaaactg aaattcacca tcatcttgac 420
tggcaatccc attaccatgc tttttttaaa aaacgtaatt tttcttgcct tacattggca 480
gagtagccct tcctggctac tggcttaatg tagtcactca gtttctaggt ggcattaggc 540
atgagacctg aagcacagac tgtcttacca caaaaggtga caagatctca aaccttagcc 600
aaagggctat gtcaggtttc aatgctatct gcttctgttc ctgctcactg ttctggattt 660
tgtccttctt catccctagc accagaattt cccagtctcc ctccctacct tcccttgttt 720
taattctaat ctatcagcaa aataactttt caaatgtttt aaccggtatc tccatgtgtc 780
tgggctcaac atgcta 796

<210> 180
<211> 488
<212> DNA
<213> Homo sapien

<400> 180
ggatgtgctg caaggcgatt aagttgggta acgccagggt tttcccagtc acgacgttgt 60
aaaacgacgg ccagtgaatt gtaatacgac tcactatagg gcgaattggg cccgacgtcg 120
catgctcccg gccgccatgg ccgcgggata gcatgttgag cccagacacc tgcaggtcat 180
ttggagagat ttttcacgtt accagcttga tggtcttttt caggaggaga gacactgagc 240
actcccaagg tgaggttgaa gatttcctct agatagccgg ataagaagac taggagggat 300
gcctagaaaa tgattagcat gcaaatttct acctgccatt tcagaactgt gtgtcagccc 360
acattcagct gcttcttgtg aactgaaaag agagaggtat tgagactttt ctgatggccg 420
ctctaacatt gtaacacagt aatctgtgtg tgtgtgggtg tgtgtgtgtg tctgggctca 480
acatgcta 488

<210> 181
<211> 317
<212> DNA
<213> Homo sapien

<400> 181
tagcatgttg agcccagaca cggcgacggt acctgatgag tggggtgatg gcacctgtga 60
aaaggaggaa cgtcatcccc catgatattg gggacccaga tgatgaacca tggctccgcg 120
tcaatgcata tttaatccat gatactgctg attggaagga cctgaacctg aagtttgtgc 180
tgcaggttta tcgggactat tacctcacgg gtgatcaaaa cttcctgaag gacatgtggc 240
ctgtgtgtct agtaagggat gcacatgcag tggccagtgt gccaggggta tggttggtgt 300
ctgggctcaa catgcta 317

<210> 182
<211> 507
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(507)
<223> n = A,T,C or G

<400> 182
tagcatgttg agcccagaca ctggctgtta gccaaatcct ctctcagctg ctccctgtgg 60
tttggtgact caggattaca gaggcatcct gtttcaggga acaaaaagat tttagctgcc 120

agcagagagc accacataca ttagaatggt aaggactgcc acctccttca agaacaggag 180
tgagggtggt ggtgaatggg aatggaagcc tgcattccct gatgcatttg tgctctctca 240
aatcctgtct tagtcttagg aaaggaagta aagtttcaag gacggttccg aactgctttt 300
tgtgtctggg ctcaacatgc tatcccgcgg ccatggcggc cgggagcatg cgacgtcggg 360
cccaattcgc cctatagtga gtcgtattac aattcactgg ccgtcgtttt acaacgtcgt 420
gactgggaaa accctggcgt tacccaactt aatcgccttg cagcacatcc cccttccca 480
gctggcgtaa tancgaaaag gcccgca 507

<210> 183
<211> 227
<212> DNA
<213> Homo sapien

<400> 183
gatttacgct gcaacactgt ggaggtagcc ctggagcaag gcaggcatgg atgcttctgc 60
aatccccaaa tggagcctgg tatttcagcc aggaatctga gcagagcccc ctctaattgt 120
agcaatgata agttattctc tttgttcttc aaccttccaa tagccttgag cttccagggg 180
agtgtcgtta atcattacag cctggtctcc acagtgttgc agcgtaa 227

<210> 184
<211> 225
<212> DNA
<213> Homc sapien

<400> 184
ttacgctgca acactgtgga gcagattaac atcagacttt tctatcaaca tgactggggt 60
tactaaaaag acaacaaatc aatggcttca aaagtctaag gaataatttc gatacttcaa 120
ctttataaaa cctgacaaaa ctatcaatca agcataaaga cagatgaaga acatttccag 180
attttggcca atcagatatt ttacctccac agtgttgcag cgtaa 225

<210> 185
<211> 597
<212> DNA
<213> Homo sapien

<400> 185
ggcccgacgt cgcatgctcc cggccgccat ggccgcggga ttcgttaggg ttctctatcca 60
ctgggaccca taggctagtc agagtattta gagttgagtt cctttctgct tcccagaatt 120
tgaaagaaaa ggagtgaggt gatagagctg agagatcaga tttgcctctg aagcctgttc 180
aagatgtatg tgctcagacc ccaccactgg ggcctgtggg tgaggtcctg ggcatctatt 240
tgaatgaatt gctgaagggg agcactatgc caaggaaggg gaacccatcc tggcactggc 300
acaggggtca ccttatccag tgctcagtgc ttctttgctg ctacctggtt ttctctcata 360
tgtgaggggc aggtaagaag aagtgcccrg tgttgtgcga gttttagaac atctaccagt 420
aagtggggaa gtttcacaaa gcagcagctt tgttttgtgt attttcacct tcagttagaa 480
gaggaaggct gtgagatgaa tgttagttga gtggaaaaga cgggtaagct tagtggatag 540
agaccctaac gaatcactag tgcggccgcc ttgcaggtcg accatatggg agagctc 597

<210> 186
<211> 597
<212> DNA
<213> Homo sapien

<400> 186
ggcccgaagt tgcatgttcc cggccgccat ggccgcggga ttcgttaggg tctctatcca 60
ctacctaaaa aatcccaaac atataactga actcctcaca cccaattgga ccaatccatc 120
accccagagg cctacagatc ctcctttgat acataagaaa atttccccaa actacctaac 180
tatatcattt tgcaagattt gttttaccaa attttgatgg cctttctgag cttgtcagtg 240
tgaaccacta ttacgaacga tcggatatta actgcccctc accgtccagg tgtagctggc 300
aacatcaagt gcagtaaata ttcattaagt tttcacctac taaggtgctt aaacacccta 360
gggtgccatg tcggtagcag atcttttgat ttgtttttat ttcccataag ggtcctgttc 420
aaggtcaatc atacatgtag tgtgagcagc tagtcactat cgcatgactt ggagggtgat 480
aatagaggcc tcctttgctg ttaaagaact cttgtcccag cctgtcaaag tggatagaga 540
ccctaacgaa tcactagtgc ggccgcctgc aggtcgacca tatgggagag ctcccaa 597

<210> 187
<211> 324
<212> DNA
<213> Homo sapien

<400> 187
tcgttagggt ctctatccac ttgcaggtaa aatccaatcc tgtgtatatc ttatagtctt 60
ccatatgtag tggttcaaga gactgcagtt ccagaaagac tagccgagcc catccatgtc 120
ttccacttaa ccctgctttg ggttacacat cttaactttt ctgttcaagt ttctctgtgt 180
agtttatagc atgagtattg ggawaatgcc ctgaaacctg acatgagatc tgggaaacac 240
aaacttactc aataagaatt tctcccatat ttttatgatg gaaaaatttc acatgcacag 300
aggagtggat agagacccta acga 324

<210> 188
<211> 178
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(178)
<223> n = A,T,C or G

<400> 188
gcgcggggat tcggggtgat acctcctcat gccaaaatac aacgtntaat ttcacaactt 60
gccttccaat ttacgcattt tcaatttgct ctccccattt gttgagtcac aacaaacacc 120
attgcccaga aacatgtatt acctaacatg cacatactct taaaactact catcgctt 178

<210> 189
<211> 367
<212> DNA
<213> Homo sapien

<400> 189
tgacaccttg tccagcatct gacacagtct tggctcttgg aaaatattgg ataaatgaaa 60
atgaatttct ttagcaagtg gtataagctg agaatatacg tatcacatat cctcattcta 120
agacacattc agtgtccctg aaattagaat aggacttaca ataagtgtgt tcactttctc 180
aatagctgtt attcaattga tggtaggcct taaaagtcaa agaaatgaga gggcatgtga 240

aaaaaagctc aacatcactg atcattagaa aacttccatt caaaccccca atgagatacc 300
atctcatacc agtcagaatg gctattatta aaaagtcaaa aaataacaga tgctggacaa 360
ggtgtca 367

<210> 190
<211> 369
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(369)
<223> n = A,T,C or G

<400> 190
gacaccttgt ccagcatctg acaacgctaa cagcctgagg agatctttat ttatttattt 60
agtttttact ctggctaggc agatggtggc taaaacattc atttacccat ttattcattt 120
aattgttcct gcaaggccta tggatagagt attgtccagc actgctctgg aagctaggag 180
catggggatg aacaagatag gctacatcct gttcccacag aacttccact ttagtctggg 240
aaacagatga tatatacaaa tatataaatg aattcaggta gttttaagta cgaaaagaat 300
aagaaagcag agtcatgatt tanaatgctg gaaacagggg ctattgcttg agatattgaa 360
ggtgcccaa 369

<210> 191
<211> 369
<212> DNA
<213> Homo sapien

<400> 191
tgacaccttg tccagcatct gcacagggaa aagaaactat tatcagagtg aacaggcaac 60
ctacagaatg ggagaaaatt tttgcaatct atccatctga caaagggcta atatccagaa 120
tctacaaaga acttatacaa atttacaaga aacaaacaaa caaacaactc ctcaaaaagt 180
gggtgaagga tgtgaacaga cacttctcaa aagaagacat ttatggggcc aacaaacata 240
tgaaaaaaag ctcatcatca ctggtcacta gataaatgca aatcaaaacc acaatgagat 300
accatctcat tccagttaga atggcaatca ttaaaaagtc aggaaacaac agatgctgga 360
caaggtgtc 369

<210> 192
<211> 449
<212> DNA
<213> Homo sapien

<400> 192
tgacgcttgg ccacttgaca cttcatcttt gcacagaaaa acttctttac agatttaatt 60
caagactggt ctagtgacag tcctccagac atttttttcat ttgttccata tacgtggaat 120
tttaaaatca tgtttcatca gtttgaaatg atttgggctg ctaatcaaca caattggatc 180
gactgttcta ctaaacaaca ggaaaatgtg tatctggcag cctgtggaga aacactaaac 240
attgattttt ctttgccttt tacggacttt gttccagcta catgtaatac caagttctct 300
ttaagaggag aagatgttga tcttcatttg tttctaccag actgccaccc tagtaaatat 360
tctttattta tgctggtaaa aaattgccat ccaaataaga tgattcatga tactggtatt 420
cctgctgagt gtcaagtggc caagcgtca 449

Sub A1

<210> 193
<211> 372
<212> DNA
<213> Homo sapien

<400> 193
tgacgcttgg ccacttgaca ccagggatgt akcagttgaa tataatcctg caattgtaca 60
tattggcaat ttcccatcaa acattctaga aagagacaac caggattgct aggccataaa 120
agctgcaata aataactggt aattgcagta atcatttcag gccaattcaa tccagtttgg 180
ctcagaggtg cctttggctg agagaagagg tgagatataa tgtgttttct tgcaacttct 240
tggaagaata actccacaat agtctgagga ctagatacaa acctatttgc cattaaagca 300
ccagagtctg ttaattccag tactgataag tgttggagat tagactccag tgtgtcaagt 360
ggccaagcgt ca 372

<210> 194
<211> 309
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(309)
<223> n = A,T,C or G

<400> 194
tgacgcttgg ccacttgaca cttatgtaga atccatcgtg ggctgatgca agccctttat 60
ttaggcttag tgttgtgggc accttcaata tcacactaga gacaaacgcc acaagatctg 120
cagaaacatt cagttctgan cactcgaatg gcaggataac tttttgtgtt gtaatccttc 180
acatatacaa aaacaaactc tgcantctca cgttacaaaa aaacgtactg ctgtaaaata 240
ttaagaaggg gtaaaggata ccatctataa caaagtaact tacaactagt gtcaagtggc 300
caagcgtca 309

<210> 195
<211> 312
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(312)
<223> n = A,T,C or G

<400> 195
tgacgcttgg ccacttgaca cccaatctcg cacttcatcc tcccagcacc tgatgaagta 60
ggactgcaac tatccccact tcccagatga ggggaccaan gtacacatta ggacccggat 120
gggagcacag atttgtccga tcccagactc caagcactca gcgtcactcc aggacagcgg 180
ctttcagata aggtcacaaa catgaatggc tccgacaacc ggagtcagtc cgtgctgagt 240
taaggcaatg gtgacacgga tgcacgtgtn acctgtaatg gttcatcgta agtgtcaagt 300
ggccaagcgt ca 312

<210> 196
<211> 288
<212> DNA
<213> Homo sapien

<400> 196
tgtatcgacg tagtggtctc ctcagccatg cagaactgtg actcaattaa acctctttcc 60
tttatgaatt acccaatctc gggtagtgtc tttatagtag tgtgagaatg gactaataca 120
agtacatttt acttagtaat aataataaac aaatatatta catttttgtg tatttactac 180
accatatttt ttattgttat tgtagtgtac accttctact tattaaaaga aataggcccg 240
aggcgggcag atcacgaggt caggagatgg agaccactac gtcgatac 288

<210> 197
<211> 289
<212> DNA
<213> Homo sapien

<400> 197
ttgggcacct tcaatatcat gacaggtgat gtgataacca agaaggctac taagtgatta 60
atgggtgggt aatgtataca gagtaggtac actggacaga ggggtaattc atagccaagg 120
caggagaagc agaatggcaa aacatttcat cacactactc aggatagcat gcagtttaaa 180
acctataagt agtttatttt tggaattttc cacttaatat tttcagactg caggtaacta 240
aactgtggaa cacaagaaca tagataaggg gagaccacta cgtcgatac 289

<210> 198
<211> 288
<212> DNA
<213> Homo sapien

<400> 198
gtatcgacgt agtggtctcc caagcagtgg gaagaaaacg tgaaccaatt aaaatgtatc 60
agatacccca aagaaaggcg cttgagtaaa gattccaagt gggtcacaat ctcagatctt 120
aaaattcagg ctgtcaaaga gatttgctat gaggttgctc tcaatgactt caggcacagt 180
cggcaggaga ttgaagccct ggccattgtc aagatgaagg agctttgtgc catgtatggc 240
aagaaagacc ccaatgagcg ggactcctgg agaccactac gtcgatac 288

<210> 199
<211> 1027
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(1027)
<223> n = A,T,C or G

<400> 199
gctttttggg aaaaacncaa ntgggggaaa gggggnttnn tngcaagggg ataaaggggg 60
aancccaggg tttccccatt cagggaggtg taaaaagncg gccaggggat tgtaanagga 120
ttcaataata gggggaatgg gcccngaagt tgcaaggttc cngcccgcca tgnccgcggg 180
atttagtgac attacgacgs tggtaataaa gtgggsccaa waaatatttg tgatgtgatt 240

tttsgaccag tgaatccatt gwacaggacc tcatttccty tgagatgrta gccataatca 300
gataaaagrt tagaagtytt tctgcacgtt aacagcatca ttaaatggag tggcatcacc 360
aatttcaccc tttgttagcc gataccttcc ccttgaaggc attcaattaa gtgaccaatc 420
gtcatacgag aggggatggc atggggattg atgatgatat caggggtgat accttcacag 480
gtgaaaggca tatcctcttg tctatactga ataccacaag tacccttttg accatgtcga 540
ctagcaaatt tgtctccaat ctgtgtwatc cctaacagag cgtaccctta ttttacaaaa 600
tttatatcct tcctgattga gagttaccat aacctgatcc acaatgcccg tctcgctwgt 660
tctgagaaaa gtgctacagt ctctcttggt atagcgtcta ttggtgctct ccaattcatc 720
ttcatttttc aggcaaggtg aactgttttg cctataataa cmtcatctcc tgatacmcga 780
aacccckgga rctatcaaac catcatcatc cagcgttckt watgtymcta aatccctatt 840
gcggccgcct gcaggtcaac atatnggaaa acccccccacc ccttnggagc ntaccttgaa 900
ttttccatat gtcccntaaa ttanctngnc ttancctggc cntaacctnt tccggtttaa 960
attgtttccg ccccentcc ccnccttnna accggaaacc ttaattttna accnggggtt 1020
cctatcc 1027

<210> 200
<211> 207
<212> DNA
<213> Homo sapien

<400> 200
agtgacatta cgacgctggc catcttgaat cctagggcat gaagttgccc caaagttcag 60
cacttggtta agcctgatcc ctctggttta tcacaaagaa taggatggga taaagaaagt 120
ggacacttaa ataagctata aattatatgg tccttgtcta gcaggagaca actgcacagg 180
tatactacca gcgtcgtaat gtcacta 207

<210> 201
<211> 209
<212> DNA
<213> Homo sapien

<400> 201
tgggcacctt caatatctat taaaagcaca aatactgaag aacacaccaa gactatcaat 60
gaggttacat ctggagtcct cgatatatca ggaaaaaatg aagtgaacat tcacagagtt 120
ttacttcttt gggaactcaa atgctagaaa agaaaagggt gccctctttc tctggcttcc 180
tggtcctatc cagcgtcgta atgtcacta 209

<210> 202
<211> 349
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(349)
<223> n = A,T,C or G

<400> 202
ntacgctgca acactgtgga gccactggtt tttattcccg gcaggttatc cagcaaacag 60
tcactgaaca caccgaagac cgtggtatgg taaccgttca cagtaatcgt tccagtcgtc 120
tgcgggaccc cgacgagcgt cactgggtac agaccagatt cagccggaag agaaagcgcc 180

gcagggagag actcgaactc cactccgctg gtgagcagcc ccatgttttc aactcgaagt 240
tcaaacggca ttgggttata taccatcagc tgaacttcac acacatctcc ttgaacccac 300
tggaaatcta ttttcttgtt ccgctcttct ccacagtgtt gcagcgtaa 349

<210> 203
<211> 241
<212> DNA
<213> Homo sapien

<400> 203
tgctcctctt gccttaccaa cccaaagccc actgtgaaat atgaagtgaa tgacaaaatt 60
cagttttcaa cgcaatatag tatagtttat ctgattcttt tgatctccag gacactttaa 120
acaactgcta ccaccaccac caacctaggg atttaggatt ctccacagac cagaaattat 180
ttctcctttg agtttcaggc tcctctggga ctcctgttca tcaatgggtg gtaaatggct 240
a 241

<210> 204
<211> 248
<212> DNA
<213> Homo sapien

<400> 204
tagccattta ccacccatct gcaaaccswg acmwwcargr cywgwackya ggcgatttga 60
agtactggta atgctctgat catgttagtt acataagtgt ggtcagttta caaaaattca 120
cagaactaaa tactcaatgc tatgtgttca tgtctgtgtt tatgtgtgtg taatgtttca 180
attaagtttt tttaaaaaaa agagatgatt tccaaataag aaagccgtgt tggtaaggca 240
agaggagc 248

<210> 205
<211> 505
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(505)
<223> n = A,T,C or G

<400> 205
tacgctgcaa cactgtggag ccattcatac aggtccctaa ttaaggaaca agtgattatg 60
ctacctttgc acggttaggg taccgcggcc gttaaacatg tgtcactggg caggcggtgc 120
ctctaatact ggtgatgcta gaggtgatgt ttttggtaaa caggcggggt aagatttgcc 180
gagttccttt tacttttttt aacctttcct tatgagcatg cctgtgttgg gttgacagtg 240
ggggtaataa tgacttgttg gttgattgta gatattgggc tgttaattgt cagttcagtg 300
ttttaatctg acgcaggctt atgcggagga gaatgttttc atgttactta tactaacatt 360
agttcttcta tagggtgata gattggtcca attgggtgtg aggagttcag ttatatgttt 420
gggatttttt aggtagtggg tgttganctt gaacgctttc ttaattggtg gctgctttta 480
rgcctactat gggtggtaaa tggct 505

<210> 206
<211> 179

<212> DNA
<213> Homo sapien

<400> 206
tagactgact catgtcccct accaaagccc atgtaaggag ctgagttctt aaagactgaa 60
gacagactat tctctggaga aaaataaaat ggaaattgta ctttaaaaaa aaaaaaaatc 120
ggccgggcat ggtagcacac acctgtaatc ccagctacta ggggacatga gtcagtcta 179

<210> 207
<211> 176
<212> DNA
<213> Homo sapien

<400> 207
agactgactc atgtccccta ccccaccttc tgctgtgctg ccgtgttcct aacaggtcac 60
agactggtac tggtcagtgg cctgggggtt ggggacctct attatatggg atacaaattt 120
aggagttgga attgacacga tttagtgact gatgggatat gggtggtaaa tggcta 176

<210> 208
<211> 196
<212> DNA
<213> Homo sapien

<400> 208
agactgactc atgtccccta tttaacaggg tctctagtgc tgtgaaaaaa aaaaatgctg 60
aacattgcat ataacttata ttgtaagaaa tactgtacaa tgactttatt gcatctgggt 120
agctgtaagg catgaaggat gccaagaagt ttaaggaata tgggtggtaa atggctaggg 180
gacatgagtc agtcta 196

<210> 209
<211> 345
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(345)
<223> n = A,T,C or G

<400> 209
gacgcttggc cacttgacac cttttatttt ttaaggattc ttaagtcatt tangtnactt 60
tgtaagtttt tcctgtgccc ccataagaat gatagcttta aaaattatgc tggggtagca 120
aagaagatac ttctagcttt agaatgtgta ggtatagcca ggattcttgt gaggaggggt 180
gatttagagc aaatttctta ttctccttgc ctcatctgta acatggggat aataatagaa 240
ctggcttgac aaggttggaa ttagtattac atggtaaata catgtaaaat gtttagaatg 300
gtgccaagta tctaggaagt acttgggcat gggtggtaaa tggct 345

<210> 210
<211> 178
<212> DNA
<213> Homo sapien

<400> 210
gacgcttggc cacttgacac tagagtaggg tttggccaac tttttctata aaggaccaga 60
gagtaaatat ttcaggcttt gtgggttgtg cagtctctct tgcaactact cagctctgcc 120
attgtagcat agaaatcagc catagacagg acagaaatga atgggtggta aatggcta 178

<210> 211
<211> 454
<212> DNA
<213> Homo sapien

<400> 211
tgggcacctt caatatctat ccagcgcatc taaattcgct tttttcttga ttaaaaattt 60
caccacttgc tgtttttgct catgtatacc aagtagcagt ggtgtgaggc catgcttgtt 120
ttttgattcg atatcagcac cgtataagag cagtgctttg gccattaatt tatcttcatt 180
gtagacagca tagtgtagag tggtatctcc atactcatct ggaatatttg gatcagtgcc 240
atgttccagc aacattaacg cacattcatc ttcctggcat tgtacggcct ttgtcagagc 300
tgtcctcttt ttgttgtcaa ggacattaag ttgacatcgt ctgtccagca cgagttttac 360
tacttctgaa ttcccattgg cagaggccag atgtagagca gtcctctttt gcttgtccct 420
cttgttcaca tcagtgtccc tgagcataac ggaa 454

<210> 212
<211> 337
<212> DNA
<213> Homo sapien

<400> 212
tccgttatgc cacccagaaa acctactgga gttacttatt aacatcaagg ctggaaccta 60
tttgcctcag tcctatctga ttcatgagca catggttatt actgatcgca ttgaaaacat 120
tgatcacctg ggtttcttta tttatcgact gtgtcatgac aaggaaactt acaaactgca 180
acgcagagaa actattaaag gtattcagaa acgtgaagcc agcaattgtt tcgcaattcg 240
gcattttgaa aacaaatttg ccgtggaaac tttaatttgt tcttgaacag tcaagaaaaa 300
cattattgag gaaaattaat atcacagcat aacggaa 337

<210> 213
<211> 715
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(715)
<223> n = A,T,C or G

<400> 213
tcgggtgatg cctcctcagg catcttccat ccatctcttc aagattagct gtcccaaatg 60
tttttccttc tcttctttac tgataaattt ggactccttc ttgacactga tgacagcttt 120
agtatccttc ttgtcacctt gcagacttta aacataaaaa tactcattgg ttttaaaagg 180
aaaaaagtat acattagcac tattaagctt ggccttgaaa cattttctat cttttattaa 240
atgtcggtta gctgaacaga attcatttta caatgcagag tgagaaaaga agggagctat 300
atgcatttga gaatgcaagc attgtcaaat aaacatttta aatgctttct taaagtgagc 360

acatacagaa atacattaag atattagaaa gtgtttttgc ttgtgtacta ctaattaggg 420
aagcaccttg tatagttcct cttctaaaat tgaagtagat tttaaaaacc catgtaattt 480
aattgagctc tcagttcaga ttttaggaga attttaacag ggatttggtt ttgtctaaat 540
tttgtcaatt tntttagtta atctgtataa ttttataaat gtcaaactgt atttagtccg 600
ttttcatgct gctatgaaag aaatacccan gacagggtta tttataaang gaaagangtt 660
aatttgactc ccagttcaca ggcctgagga ngnatcnccc gaaatcctta ttgcg 715

<210> 214
<211> 345
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(345)
<223> n = A,T,C or G

<400> 214
ggtaangngc atacntcggt gctcnggccg ccggagtcgg gggattcggg tgatgcctcc 60
tcaggcccac ttgggcctgc ttttcccaaa tggcagctcc tctggacatg ccattccttc 120
tcccacctgc ctgattcttc atatgttggg tgtccctgtt tttctggtgc tatttcctga 180
ctgctgttca gctgccactg tcctgcaaag cctgcctttt taaatgcctc accattcctt 240
catttgtttc ttaaatatgg gaagtgaaag tgccacctga ggccgggcac agtggctcac 300
gcctgtaatc ccagcacttt gggagcctga ggaggcatca cccga 345

<210> 215
<211> 429
<212> DNA
<213> Homo sapien

<400> 215
ggtgatgcct cctcaggcga agctcaggga ggacagaaac ctcccgtgga gcagaagggc 60
aaaagctcgc ttgatcttga ttttcagtac gaatacagac cgtgaaagcg gggcctcacg 120
atccttctga ccttttgggt tttaagcagg aggtgtcaga aaagttacca cagggataac 180
tggcttgtgg cggccaagcg ttcatagcga cgtcgctttt tgatccttcg atgtcggctc 240
ttcctatcat tgtgaagcag aattcaccaa gcgttggatt gttcacccac taatagggaa 300
cgtgagctgg gtttagaccg tcgtgagaca ggttagtttt accctactga tgatgtgtkg 360
ttgccatggt aatcctgctc agtacgagag gaaccgcagg ttcasacatt tggtgtatgt 420
gcttgcctt 429

<210> 216
<211> 593
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(593)
<223> n = A,T,C or G

<400> 216

tgacacctat gtccngcatc tgttcacagt ttccacaaat agccagcctt tggccacctc 60
tctgtcctga ggtatacaag tatatcagga ggtgtatacc ttctcttctc ttccccacca 120
aagagaacat gcaggctctg gaagctgtct taggagcctt tgggctcaga atttcagagt 180
cttgggtacc ttggatgtgg tctggaagga gaaacattgg ctctggataa ggagtacagc 240
cggaggaggg tcacagagcc ctcagctcaa gcccctgtgc cttagtctaa aagcagcttt 300
ggatgaggaa gcaggttaag taacatacgt aagcgtacac aggtagaaag tgctgggagt 360
cagaattgca cagtgtgtag gagtagtacc tcaatcaatg agggcaaatc aactgaaaga 420
agaagaccna ttaatgaatt gcttangggg aaggatcaag gctatcatgg agatctttct 480
aggaagatta ttgtttanaa ttatgaaagg antagggcag ggacagggcc agaagtanaa 540
ganaacattg cctatanccc ttgtcttgca cccagatgct ggacaaggtg tca 593

<210> 217
<211> 335
<212> DNA
<213> Homo sapien

<400> 217
tgacaccttg tccagcatct gacgtgaaga tgagcagctc agaggaggtg tcctggattt 60
cctggttctg tgggctccgt ggcaatgaat tcttctgtga agtggatgaa gactacatcc 120
aggacaaatt taatcttact ggactcaatg agcaggtccc tcactatcga caagctctag 180
acatgatctt ggacctggag cctgatgaag aactggaaga caaccccaac cagagtgacc 240
tgattgagca ggcagccgag atgctttatg gattgatcca cgcccgctac atccttacca 300
accgtggcat cgcccagatg ctggacaagg tgtca 335

<210> 218
<211> 248
<212> DNA
<213> Homo sapien

<400> 218
tacgtactgg tcttgaaggt cttaggtaga gaaaaaatgt gaatatttaa tcaaagacta 60
tgtatgaaat gggactgtaa gtacagaggg aagggtggcc cttatcgcca gaagttggta 120
gatgcgtccc cgtcatgaaa tgttgtgtca ctgcccgaca tttgccgaat tactgaaatt 180
ccgtagaatt agtgcaaatt ctaacgttgt tcatctaaga ttatggttcc atgtttctag 240
tactttta 248

<210> 219
<211> 530
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(530)
<223> n = A,T,C or G

<400> 219
tgacgcttgg ccacttgaca caagtagggg ataaggacaa agacccatna ggtggcctgt 60
cagccttttg ttactgttgc ttccctgtca ccacggcccc ctctgtaggg gtgtgctgtg 120
ctctgtggac attggtgcat tttcacacat accattctct ttctgcttca cagcagtcct 180
gaggcgggag cacacaggac taccttgtca gatgangata atgatgtctg gccaactcac 240

cccccaacct tctcactagt tatangaaga gccangccta naaccttcta tcctgncccc 300
ttgccctatg acctcatccc tgttccatgc cctattctga tttctggtga actttggagc 360
agcctggttt ntcctcctca ctccagcctc tctccatacc atggtanggg ggtgctgttc 420
cacncaaang gtcaggtgtg tctggggaat cctnananct gccnggagtt tccnangcat 480
tcttaaaaac cttcttgcct aatcanatng tgtccagtgg ccaaccntcn 530

<210> 220
<211> 531
<212> DNA
<213> Homo sapien

<400> 220
tgacgcttgg ccacttgaca ctaaatagca tcttctaaag gcctgattca gagttgtgga 60
aaattctccc agtgtcaggg attgtcagga acagggctgc tcctgtgctc actttacctg 120
ctgtgtttct gctggaaaag gagggaagag gaatggctga tttttaccta atgtctccca 180
gtttttcata ttcttcttgg atcctcttct ctgacaactg ttccctttg gtcttcttct 240
tcttgctcag agagcaggtc tctttaaaac tgagaaggga gaatgagcaa atgattaaag 300
aaaacacact tctgaggccc agagatcaaa tattaggtaa atactaaacc gcttgcctgc 360
tgtggtcact tttctcctct ttcacatgct ctatccctct atcccccacc tattcatatg 420
gcttttatct gccaagttat ccggcctctc atcaaccttc tcccctagcc tactggggga 480
tatccatctg ggtctgtctc tggtgtattg gtgtcaagtg gccaagcgtc a 531

<210> 221
<211> 530
<212> DNA
<213> Homo sapien

<400> 221
attgacgctt ggccacttga cacccgcctg cctgcaatac tggggcaagg gccttcactg 60
ctttcctgcc accagctgcc actgcacaca gagatcagaa atgctaccaa ccaagactgt 120
tggtcctcag cctctctgag gagaaagagc agaagcctgg aagtcagaag agaagctaga 180
tcggctacgg ccttggcagc cagcttcccc acctgtggca ataaagtcgt gcatggctta 240
acaatggggg cacctcctga gaaacacatt gttaggcaat tcggcgtgtg ttcatcagag 300
catatttaca caaacctcga tagtgcagcc tactatccac tattgctcct acgctgcaaa 360
cctgaacagc atgggactgt actgaatact ggaagcagct ggtgatggta cttatttgtg 420
tatctaaaca cagagaaggt acagtaagaa tatggtatca taaacttaca gggaccgcca 480
tcctatatgc agtctgttgt gaccaaaatg tgtcaagtgg ccaagcgtca 530

<210> 222
<211> 578
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(578)
<223> n = A,T,C or G

<400> 222
tgtatcgacg tagtggtctc cgggctacta ggccgttgtg tgctggtagt acctggttca 60
ctgaaaggcg catctccctc cccgcgtcgc cctgaagcag ggggaggact tcgcccagcc 120

Sub-A1

aaggcagttg tatgagtttt agctgcggca cttcgagacc tctgagccca cctccttcag 180
gagccttccc cgattaagga agccagggta aggattcctt cctcccccag acaccacgaa 240
caaaccacca ccccccctat tctggcagcc catatacatc agaacgaaac aaaaataaca 300
aataaacnaa aaccaaaaaa aaaagagaag gggaaatgta tatgtctgtc catcctgttg 360
ctttagcctg tcagctccta nagggcaggg accgtgtctt ccgaatggtc tgtgcagcgc 420
cgactgcggg aagtatcgga ggaggaagca gagtcagcag aagttgaacg gtgggcccgg 480
cggctcttgg gggctggtgt tgtacttcga gaccgctttc gctttttgtc ttagatttac 540
gtttgctctt tggagtggga naccactacn tcnataca 578

<210> 223
<211> 578
<212> DNA
<213> Homo sapien

<400> 223
tgtatcgacg tagtggtctc ctcttgcaaa ggactggctg gtgaatggtt tccctgaatt 60
atggacttac cctaaacata tcttatcatc attaccagtt gcaaaatatt agaatgtgtt 120
gtcactgttt catttgattc ctagaaggtt agtcttagat atgttacttt aacctgtatg 180
ctgtagtgct ttgaatgcat tttttgtttg cattttttgtt tgcccaacct gtcaattata 240
gctgcttagg tctggactgt cctggataaa gctgttaaaa tattcaccag tccagccatc 300
ttacaagcta attaagtcaa ctaaatgctt cctgtttttg ccagacttgt tatgtcaatc 360
ctcaatttct gggttcattt tgggtgccct aaatcttagg gtgtgacttt cttagcatcc 420
tgtaacatcc attcccaagc aagcacaact tcacataata ctttccagaa gttcattgct 480
gaagcctttc cttcacccag cggagcaact tgattttcta caacttccct catcagagcc 540
acaagagtat gggatatgga gaccactacg tcgataca 578

<210> 224
<211> 345
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(345)
<223> n = A,T,C or G

<400> 224
tgtatcgacg tantggtctc ccaaggtgct gggattgcag gcatgagcca ccactcccag 60
gtggatcttt ttctttatac ttacttcatt aggtttctgt tattcaagaa gtgtagtggt 120
aaaagtcttt tcaatctaca tggttaaata atgatagcct gggaaataaa tagaaatttt 180
ttctttcatc tttaggttga ataaagaaac agaaaaaata gaacatactg aaaataatct 240
aagttccaac catagaagaa ctgcagaaga aatgaagaaa gtgatgatga tttagatttt 300
gatattgatt tagaagacac aggaggagac cactacgtcg ataca 345

<210> 225
<211> 347
<212> DNA
<213> Homo sapien

<400> 225
tgtatcgacg tagtggtctc caaactgagg tatgtgtgcc actagcacac aaagccttcc 60

SubA1

aacagggacg caggcacagg cagtttaaag ggaatctgtt tctaaattaa tttccacctt 120
ctctaagtat tctttcctaa aactgatcaa ggtgtgaagc ctgtgctctt tcccaactcc 180
cctttgacaa cagccttcaa ctaacacaag aaaaggcatg tctgacactc ttcctgagtc 240
tgactctgat acgttgttct gatgtctaaa gagctccaga acaccaaagg gacaattcag 300
aatgctggtg tataacagac tccaatggag accactacgt cgataca 347

<210> 226
<211> 281
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(281)
<223> n = A,T,C or G

<400> 226
aggngnggga ntgtatcgac gtagtggtct cccaacagtc tgtcattcag tctgcaggtg 60
tcagtgtttt ggacaatgag gcaccattgt cacttattga ctcctcagct ctaaatgctg 120
aaattaaatc ttgtcatgac aagtctggaa ttcctgatga ggttttacaa agtattttgg 180
atcaatactc caacaaatca gaaagccaga aagaggatcc tttcaatatt gcagaaccac 240
gagtggattt acacacctca ggagaccact acgtcgatac a 281

<210> 227
<211> 3646
<212> DNA
<213> Homo sapien

<400> 227
gggaaacact tcctcccagc cttgtaaggg ttggagccct ctccagtata tgctgcagaa 60
tttttctctc ggtttctcag aggattatgg agtccgcctt aaaaaaggca agctctggac 120
actctgcaaa gtagaatggc caaagtttgg agttgagtgg ccccttgaag ggtcactgaa 180
cctcacaatt gttcaagctg tgtggcgggt tgttactgaa actcccggcc tccctgatca 240
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catgcaccat tcataatttt acctccaagg tcctcctgag ccagaccgtg ttttcgcctc 360
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cccagatagt aaaaggaaac tccaaaaact agagggattt tgctggaatg aataccagtc 1200
agcttttaga gatagcctaa aaggtttttg acagtcaaga ggttgaaaaa caaaaacaag 1260
cagctcaggc agctgaaaaa agccactgat aaagcatcct ggagtatcag agtttactgt 1320

Sub A1

```
tagatcagcc tcatttgact tcccctccca catggtgttt aaatccagct acactacttc    1380
ctgactcaaa ctccactatt cctgttcatg actgtcagga actgttggaa actactgaaa    1440
ctggccgacc tgatcttcaa aatgtgcccc taggaaaggt ggatgccacc atgttcacag    1500
acagtagcag cttcctcgag aagggactac gaaaggccgg tgcagctgtt accatggaga    1560
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ggtaaccaga aagctgattc agcagctcaa gatgcagtgt gactttcagt cacgcctcta    1860
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caggagaaaa gtgggaaatt gactttacag aagtaaaacc acaccgggct gggtacaaat    2280
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aacagagccc aactagaaac atgggtcccc agggctgggt caggcccctt aaaactgcac    3060
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caatgatttg attcccccaa aaacacaagt ggggaatgta gtgtccaacc tggtttttac    3240
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cccctctacc cttcagcaac caccaccctg atcagtcagc agccatcagc accgaggcaa    3540
ggccctccac cagcaaaaag attctgactc actgaagact tggatgatca ttagtatttt    3600
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<210> 228
<211> 419
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(419)
<223> n = A,T,C or G

<400> 228

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gtgtgttaag agtgggaatt tttggagtac agagtaaggc acctaaccct agctggggtt 120
tggtgacggt cccagatggc ttacagaaga aagtgtcctg agatgagttt ttaagaatga 180
ataaggatag acacaagtgg ggactgactt ggcagtggtg aatggtgggt ggcaaaaaac 240
ttcgcatgta tggaaactgc acgtacagga atgaagaatg agactgtgtg gtgtttaatg 300
agctgcaaat actaatttta tcctgaaagt tttgaagagt taactaaaaa gtatttttta 360
gtaaggaaat aaccctacat ttcagggtta ttgtttgttt anatattgaa ggtgcccaa 419

<210> 229
<211> 148
<212> DNA
<213> Homo sapien

<400> 229
aagagggtac ctgtatgtag ccatggtggc aatgagagac tgattactac ctgctggaga 60
ttgtttaagt gagttaatat attaaggata aagggagcca ggtttttga ctgttggaga 120
aggaaattac agatattgaa ggtcccaa 148

<210> 230
<211> 257
<212> DNA
<213> Homo sapien

<400> 230
taagagggta cmaaaaaaaa aaaatagaac gaatgagtaa gacctactat ttgatagtac 60
aacagggtga ctatagtcaa tgataactta attatacatt taacatagag tgtaattgga 120
ttgtttgtaa ctcgaaggat aaatgcttga gaggatggat accccattct ccatgatgta 180
cttatttcac attacatgcc tgtatcaaag catctcatat accctataaa tatgtacacc 240
tactatgtac cctctta 257

<210> 231
<211> 260
<212> DNA
<213> Homo sapien

<400> 231
taagagggta cgggtatttg ctgatgggat ttttttttct ttctttttct ttggaaaaca 60
aaatgaaagc cagaacaaaa ttattgaaca aaagacaggg actaaatctg gagaaatgaa 120
gtcccctcac ctgactgcca tttcattcta tctgaccttc cagtctaggt taggagaata 180
gggggtggag gggattaatc tgatacaggt atatttaaag caactctgca tgtgtgccag 240
aagtccatgg taccctctta 260

<210> 232
<211> 596
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(596)
<223> n = A,T,C or G

<400> 232
tgctcctctt gccttaccaa ccacaaatta gaaccataat gagatgtcac ctcatacctg 60
gtgggattaa cattatttaa aaaatcagaa gtattgacaa ggatgtgaag aaattagaac 120
atctgtgcac tgttggtggg aatgtaaaaa aggtgtggcc actatgggta acagcatgaa 180
ggttcctcaa aaaaaatttt ttttaatcta ctctatgatc gatcttgagg ttgtttatgc 240
aaaagaactg aaatcaggat tttgaggaaa tattcacatt cccacatcca tttctgcttt 300
attcataata ctcaagagat ggaaacaacc taaatgtcca tcccgggatg aatggataaa 360
cacagtgtgg tatatgcata caatggaata ttatttagtc tttaaaaaga aaaattctat 420
catatactac aacttanatn aaccttgagg acacaatgct nagtgaaata agccacggaa 480
ggacgaatac tgcattattc ccttatatga agtatctaaa gtggtcaaac tcttanagca 540
naaagtaaaa atgggtggtt gccanacagt tggttaggcn agaaganaan cctant 596

<210> 233
<211> 96
<212> DNA
<213> Homo sapien

<400> 233
tcttctgaag acctttcgcg actcttaagc tcgtggttgg taaggcaaga ggagcgttgg 60
taaggcaaga ggagcgttgg taaggcaaga ggagca 96

<210> 234
<211> 313
<212> DNA
<213> Homo sapien

<400> 234
tgtaagtcga gcagtgtgat gataaaactt gaatggatca atagttgctt cttatggatg 60
agcaaagaaa gtagtttctt gtgatggaat ctgctcctgg caaaaatgct gtgaacgttg 120
ttgaaaagac aacaaagagt ttagagtagt acataaattt agaatagtac ataaacttag 180
aatagtacat aaacttagta cataaataat gcacgaagca ggggcagggc ttgagagaat 240
tgacttcaat ttggaaagag tatctactgt aggttagatg ctctcaaaca gcatcacact 300
gctcgactta caa 313

<210> 235
<211> 550
<212> DNA
<213> Homo sapien

<400> 235
aacgaggaca gatccttaaa aagaatgttg agtgaaaaaa gtagaaaata agataatctc 60
caaagtccag tagcattatt taaacatttt taaaaaatac actgataaaa attttgtaca 120
tttcccaaaa atacatatgg aagcacagca gcatgaatgc ctatgggrtt gaggataggg 180
gttgggagta gggatgggga taaaggggga aaataaaacc agagaggagt cttacacatt 240
tcatgaacca aggagtataa ttatttcaac tatttgtacc wgaagtccag aaagagtgga 300
ggcagaaggg ggagaagagg gcgaagaaac gtttttggga gaggggtccc asaagagaga 360
ttttcgcgat gtggcgctac atacgttttt ccaggatgcc ttaagctctg caccctattt 420
ttctcatcac taatattaga ttaaaccctt tgaagacagc gtctgtggtt tctctacttc 480
agctttccct ccgtgtcttg cacacagtag ctgttttaca agggttgaac tgactgaagt 540
gagattattc 550

SubA1

<210> 236
<211> 325
<212> DNA
<213> Homo sapien

<400> 236
tagactgact catgtcccct accagagtag ctagaattaa tagcacaagc ctctacaccc 60
aggaactcac tattgaatac ataaatggaa tttattcagc cttaaaaagt ttggaaggaa 120
attctgacat atgctaaaac atggatgaac cttgaagact ttatgataag taaaagaagc 180
cagtcataaa aggaaaaata ttgcatgatt ccacttatat gaggtaccta gagtagtcaa 240
tttcatagaa acacaaaata gaatggtgtt tgccagggct tttgaggaaa agggaatgac 300
aagttagggg acatgagtca gtcta 325

<210> 237
<211> 373
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(373)
<223> n = A,T,C or G

<400> 237
tagactgact catgtcccct atctactcaa catttccact tgaagtctga taggcatctc 60
agacttatct tgtcccaaag caaactcttt atttcttttc atcctagtct ttatttcttg 120
tgctgtctta cccatctcaa aagagtgcca aaatccacca agttgctgaa acagaaatct 180
aagaaatatc cttgattctt ctttttccca tctacttcac ttctaattca ttagtaaata 240
atctgtttca gaaaaccaaa cacctcatgt tctcactcat aaggggagt tgaacaatga 300
gaacacacag acacagggag gggaacatca cacaccacgg cccgtcaggg agtangggac 360
atgagtcagt cta 373

<210> 238
<211> 492
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(492)
<223> n = A,T,C or G

<400> 238
tagactgact catgtcccct ataatgctcc caggcatcag aaagcatctc aaactggagc 60
tgacaccatg gcagaggttt caggtaagtc acaaaagggg tcctaaagaa tttgccctca 120
atatcagagt gattagaaga agtggacaga gctacccaag ttaaacatat gcgagataaa 180
aaaaatatgg cacttgtgaa cacacactac aggaggaaaa taaggaacat aatagcatat 240
tgtgctatta tgatgatgaa gaacctctct anaagaaaac ataaccaaag aaacaaagaa 300
aattcctgcn aatgtttaat gctatagaag aaattaacaa aaacatatat tcaatgaatt 360
cagaaaagtt agcaggtcan aagaaaacaa atcaaagacc agaataatcc cattttagat 420

Sub A1

tgtcgagtaa actanaacag aaagaatacc actggaaatt gaattcctac gtangggaca 480
tgantcantc ta 492

<210> 239
<211> 482
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(482)
<223> n = A,T,C or G

<400> 239
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tggattacat acttctaagc cattaggaga ctctatgtta aaccaaaagg aaatgttact 180
agatcttcat ttgatcaata ggatgtgata atcatcatct ttctgctcta atggaaaagt 240
actanaaaca tggaaccata atcttagatg aacaacgtta gaatttgcac taattctacg 300
gaatttcagt aattcggcaa atgtcgggca gtgacacaac atttcatgac ggggacgcat 360
ctaccaactt ctggcgataa gggccaccct tccctctgta cttacagtcc catttcatac 420
acagtctttg attaaatatt cacatttttt ctctacctaa agaccttcaa gaccagtacg 480
ta 482

<210> 240
<211> 519
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(519)
<223> n = A,T,C or G

<400> 240
tgtatcgacg tagtggtctc cccatgtgat agtctgaaat atagcctcat gggatgagag 60
gctgtgcccc agcccgacac ccgtaaaggg tctgtgctga ggtggattag taaaagagga 120
aagccttgca gttgagatag aggaagggca ctgtctcctg cctgccctg ggaactgaat 180
gtctcggtat aaaacccgat tgtacatttg ttcaattctg agataggaga aaaaccaccc 240
tatggcggga ggcgagacat gttggcagca atgctgcctt gttatgcttt actccacaga 300
tgtttgggcg gagggaaaca taaatctggc ctacgtgcac atccaggcat agtacctccc 360
tttgaactta attatgacac agattccttt gctcacatgt ttttttgctg accttctcct 420
tattatcacc ctgctctcct accgcattcc ttgtgctgag ataatgaaaa taatatcaat 480
aaaaacttga nggaactcgg agaccactac gtcgataca 519

<210> 241
<211> 771
<212> DNA
<213> Homo sapien

<220>

Sub A1

<221> misc_feature
<222> (1)...(771)
<223> n = A,T,C or G

<400> 241
tgtatcgacg tagtggtctc cactcccgcc ttgacggggc tgctatctgc cttccaggcc 60
actgtcacgg ctcccgggta gaagtcactt atgagacaca ccagtgtggc cttgttggct 120
tgaagctcct cagaggaggg tgggaacaga gtgaccgagg gggcagcctt gggctgacct 180
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ccanacttgg agccagagaa gcgattagaa acccctgagg gccgattacc gacctcataa 360
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ccaacgtcac tgctggttcc antgcaggga aaatggttga tcnaactgtc caagaaaacc 480
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naactccccn ccgccgtttg ggattgncat naacctttga aattttttcc tattanttgt 600
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ttaaaanttg tttatcccgc cncccnattt cccccccaac tttccaaaac ccgaaaccnt 720
tnaaatttnt tnaaaccctg gggggttccc nnaattnnan ttnaanctnc c 771

<210> 242
<211> 167
<212> DNA
<213> Homo sapien

<400> 242
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tcctctctag gaacctctgg atttcaaat tctttgagga attcatccaa attatctgcc 120
tctcctcctt tcctcctttt tctaaggtct tctggtacaa gcggtca 167

<210> 243
<211> 338
<212> DNA
<213> Homo sapien

<400> 243
ttgggcacct tcaatatcta ctgatctaaa tagtgtggtt tgaggcctct tgttcctggc 60
taaaaatcct tggcaagagt caatctccac tttacaatag aggtaaaaat cttacaatgg 120
atattcttga caaagctagc atagagacag caattttaca caaggtattt ttcacctgtt 180
taataacagt ggttttccta cacccatagg gtgccaccaa gggaggagtg cacagttgca 240
gaaacaaatt aagatactga agacaacact acttaccatt tcccgtatag ctaaccacca 300
gttcaactgt acatgtatgt tcttatgggc aatcaaga 338

<210> 244
<211> 346
<212> DNA
<213> Homo sapien

<400> 244
tttttggctc ccatacagca cactctcatg ggaaatgtct gttctaaggt caacccataa 60
tgcaaaaatc atcaatatac ttgaagatcc ccgtgtaagg tacaatgtat ttaatattat 120
cactgataca attgatccaa taccagtttt agtctggcat tgaatcaaat cactgttttt 180

gttgtataaa aagagaaata tttagcttat atttaagtac catattgtaa gaaaaaagat 240
gcttatcttt acatgctaaa atcatgatct gtacattggt gcagtgaata ttactgtaaa 300
agggaagaag gaatgaagac gagctaagga tattgaaggt gcccaa 346

<210> 245
<211> 521
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(521)
<223> n = A,T,C or G

<400> 245
accaatccca cacggatact gagggacaag tatatcatcc catttcatcc ctacagcagc 60
aacttcatga ggcaggagtt attagtccca ttttacagaa gaggaaactg agacttaggg 120
agatcaagta atttgcccag gtcgcacaat tagtgataga gccagggctt gaagcgacgt 180
ctgtcttaag ccaatgaccc ctgcagatta ttagagcaac tgttctccac aacagtgtaa 240
gcctcttgct anaagctcag gtccacaagg gcagagattt ttgtctgttt tgctcattgc 300
tccttcccca ttgcttagag cagggtctgc cacgaancag gttctcaatg catagttatt 360
aaatgtatat aagagcaaac atatgttaca gagaactttc tgtatgcttg tcacttacat 420
gaatcacctg tganatgggt atgcttgttc cccantgttg cagatnaaga tattgaangt 480
gcccaaatca ctanttgcgg gcgcctgcan gtccancata t 521

<210> 246
<211> 482
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(482)
<223> n = A,T,C or G

<400> 246
tggaaccaat ccaaataccc atcaatgata gactggataa agaaaatttg gcacatgttc 60
accatgaaat actatgcagc ataaaaaag gatgagttca tatcctttgc agggacatgg 120
atgaagctgg agaccatcat tctcagcaaa ctaacaaggg aacagaaaac caaacactgc 180
atgttctcac tcttaagtgg gagctgaaca atgagaacac atggacacag ggaggggaac 240
atcacacagt ggggcctgct ggtgggtagg ggtctagggg agggatagca ttaggagaaa 300
tacctaatgt agatgacggg ttgatgggtg cagcaaacca ccatgacacg tgtataccta 360
tgtaacaaac ctgcatgttc tgcacatgta ccccagaact taaagtgtta ataaaaaaat 420
taagaaaaaa gttaagtatg tcatagatac ataaaatatt gtanatattg aaggtgccca 480
aa 482

<210> 247
<211> 474
<212> DNA
<213> Homo sapien

Sub A1

<220>
<221> misc_feature
<222> (1)...(474)
<223> n = A,T,C or G

<400> 247
ttcgatacag gcacagagta agcagaaaaa tggctgtggt ttaaccaagt gagtacagtt 60
aagtgagaga ggggcagaga agacaagggc atatgcaggg ggtgattata acaggtggtt 120
gtgctgggaa gtgagggtac tcggggatga ggaacagtga aaaagtggca aaaagtggta 180
agatcagtga attgtacttc tccagaattt gatttctggn ggagtcaaat aactatccag 240
tttggggtat catanggcaa cagttgaggt ataggaggta gaagtcncag tgggataatt 300
gaggttatga anggtttggt actgactggt actgacaang tctgggttat gaccatggga 360
atgaatgact gtanaagcgt anaggatgaa actattccac ganaaagggg tccnaaaact 420
aaaaannnaa gnnnnnggggg aatattattt atgtggatat tgaangtgcc caaa 474

<210> 248
<211> 355
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(355)
<223> n = A,T,C or G

<400> 248
ttcgatacag gcaaacatga actgcaggag ggtggtgacg atcatgatgt tgccgatggt 60
ccggatggnc acgaagacgc actggancac gtgcttacgt ccttttgctc tgttgatggc 120
cctgagggga cgcaggaccc ttatgaccct cagaatcttc acaacgggag atggcactgg 180
attgantccc antgacacca gagacacccc aaccacccagn atatcantat attgatgtag 240
ttcctgtaga nggccccctt gtggaggaaa gctccatnag ttggtcatct tcaacaggat 300
ctcaacagtt tccgatggct gtgatgggca tagtcatant taaccntgtn tcgaa 355

<210> 249
<211> 434
<212> DNA
<213> Homo sapien

<400> 249
ttggattggt cctccaggag aacaagggga aaaaggtgac cgagggctcc ctggaactca 60
aggatctcca ggagcaaaag gggatggggg aattcctggt cctgctggtc ccttaggtcc 120
acctggtcct ccaggcttac caggtcctca aggcccaaag ggtaacaaag gctctactgg 180
acccgctggc cagaaaggtg acagtggtct tccagggcct cctgggcctc caggtccacc 240
tggtgaagtc attcagcctt taccaatctt gtcctccaaa aaaacgagaa gacatactga 300
aggcatgcaa gcagatgcag atgataatat tcttgattac tcggatggaa tggaagaaat 360
atttggttcc ctcaattccc tgaaacaaga catcgagcat atgaaatttc caatgggtac 420
tcagaccaat ccaa 434

<210> 250
<211> 430
<212> DNA

Sub A1

<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(430)
<223> n = A,T,C or G

<400> 250
tggattggtc acatggcaga gacaggattc caaggcagtg agaggaggat acaatgcttc 60
tcactagtta ttattattta ttttatttt gagatgaagt ctcgctttgt ctcccaggct 120
ggagagcggt ggtgcgatct tggctctctg caacccccgc ctcaagcaat tctcctgtct 180
tagcctcgcg ggtagatgga attacaggcg cccaccgcca tgcccaacta attttttgt 240
gtcttcagta gagacagggt ttcgccatgt tgggcaggct ggtcttgaac tcctgacctc 300
nagtgatctg ccctcctcgg cctcacaaag tgctggaatt acaggcatgg gctgctgcac 360
ccagtcaact tctcactagt tatggcctta tcattttcac cacattctat tggcccaaaa 420
aaaaaaaaan 430

<210> 251
<211> 329
<212> DNA
<213> Homo sapien

<400> 251
tggtactcca ccatyatggg gtcaaccgcc atcctcgccc tcctcctggc tgttctccaa 60
ggagtctgtg ccgaggtgca gctgrtgcag tctggagcag aggtgaaaaa gtccggggag 120
tctctgaaga tctcctgtaa gggttctgga tacaccttta agatctactg gatcgcctgg 180
gtgcgccagt tgcccgggaa aggcctggag tggatggggc tcatctttcc tgatgactct 240
gataccagat acagcccgtc cttccaaggc caggtcacca tctcagtcga taagtccatc 300
agcaccgcct atctgcagtg gagtaccaa 329

<210> 252
<211> 536
<212> DNA
<213> Homo sapien

<400> 252
tggtactcca ctcagcccaa ccttaattaa gaattaagag ggaacctatt actattctcc 60
caggctcctc tgctctaacc aggcttctgg gacagtatta gaaaaggatg tctcaacaag 120
tatgtagatc ctgtactggc ctaagaagtt aaactgagaa tagcataaat cagaccaaac 180
ttaatggtcg ttgagacttg tgtcctggag cagctgggat aggaaaactt ttgggcagca 240
agaggaagaa ctgcctggaa gggggcatca tgttaaaaat tacaagggga acccacacca 300
ggccccttc ccagctctca gcctagagta ttagcatttc tcagctagag actcacaact 360
tccttgctta gaatgtgcca ccgggggggag tccctgtggg tgatgaggct ctcaagagtg 420
agagtggcat cctatcttct gtgtgcccac aggagcctgg cccgagactt agcaggtgaa 480
gtttctggtc caggctttgc ccttgactca ctatgtgacc tctggtggag taccaa 536

<210> 253
<211> 507
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(507)
<223> n = A,T,C or G

<400> 253
ntgttgcgat cccagtaact cgggaagctg aggcgggagg atcacctgag ctcaggaggt 60
tgaggccgca gtgagccggg accacgccac tacactccag cctggggcat agagtgagac 120
cctccaagac agaaaagaaa agaaaggaag ggaaagggaa agggaaaagg aaaaggaaaa 180
ggaaaaggaa aaggaaaaga caagacaaaa caagacttga atttggatct cctgacttca 240
attttatgtt ctttctacac cacaattcct ctgcttacta agatgataat ttagaaaccc 300
ctcgttccat tctttacagc aagctggaag tttggtcaag taattacaat aatagtaaca 360
aatttgaata ttatatgcca ggtgtttttc attcctgctc tcacttaatt ctcaccactc 420
tgatataaat acaattgctg ccgggtgtgg tggctcatgc ctgtaatccc ggcactttgg 480
gagaccgagg tgggcggats gcaacaa 507

<210> 254
<211> 222
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(222)
<223> n = A,T,C or G

<400> 254
ttggattggt cactgtgagg aagccaaatc ggatccgaga gtctttttct aaaggccagt 60
actggccaca ctttctcctg ccgccttcct caaagctgaa gacacacaga gcaaggcgct 120
tctgttttac tccccaatgg taactccaaa ccatagatgg ttagctnccc tgctcatctt 180
tccacatccc tgctattcag tatagtccgt ggaccaatcc aa 222

<210> 255
<211> 463
<212> DNA
<213> Homo sapien

<400> 255
tgttgcgatc cataaatgct gaaatggaaa taaacaacat gatgagggag gattaagttg 60
gggagggagc acattaaggt ggccatgaag tttgttggaa gaagtgactt ttgaacaagg 120
ccttggtgtt aagagctgat gagagtgtcc cagacagagg ggccactggt acaatagacg 180
agatgggaga gggcttggaa ggtgtgcgaa ataggaagga gtttgttctg gtatgagtct 240
agtgaacaca gaggcgagag gccctggtgg gtgcagctgg agagttatgc agaataacat 300
taggccctgt gggggactgt agactgtcag caataatcca cagtttggat tttattctaa 360
gagtgatggg aagccgtgga aaggggttta agcaaggagt gaaattatca gatttacagt 420
gataaaaata aattggtctg gctactgggg aaaaaaaaaa aaa 463

<210> 256
<211> 262
<212> DNA
<213> Homo sapien

<400> 256
ttggattggt caacctgctc aactctacyt ttcctccttc ttcctaaaaa attaatgaat 60
ccaatacatt aatgccaaaa cccttgggtt ttatcaatat ttctgttaaa aagtattatc 120
cagaactgga cataatacta cataataata cataacaacc ccttcatctg gatgcaaaca 180
tctattaata tagcttaaga tcactttcac tttacagaag caacatcctg ttgatgttat 240
tttgatgttt ggaccaatcc aa 262

<210> 257
<211> 461
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(461)
<223> n = A,T,C or G

<400> 257
gnggnnnnnn nnncaattcg actcngttcc cntggtancc ggtcgacatg gccgcgggat 60
taccgcttgt nnctgggggt gtatggggga ctatgaccgc ttgtagctgg gggtgtatgg 120
gggactatga ccgcttgtag mtggkggtgt atgggggact atgaccgctt gtcgggtggt 180
cggataaacc gacgcaaggg acgtgatcga agctgcgttc ccgctctttc gcatcggtag 240
ggatcatgga cagcaatatc cgcattcgyc tgaaggcgtt cgaccatcgc gtgctcgatc 300
aggcgaccgg cgacatcgcc gacaccgcac gccgtaccgg cgcgctcatc cgcggtccga 360
tcccgcttcc cacgcgcatc gagaagttca cggtcaaccg tggcccgcac gtcgacaaga 420
agtcgcgcga gcagttcgag gtgcgtacct acaagcggtc a 461

<210> 258
<211> 332
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(332)
<223> n = A,T,C or G

<400> 258
tgaccgcttg tagctggggg tgtatggggg actacgaccg cttgtagctg ggggtgtatg 60
ggggactatg accgcttgta gctgggggtg tatgggggac tatgaccgct tgtagctggg 120
ggtgtatggg ggactaggac cgcttgtagc tgggggtgta tgggggacta tgaccgcttg 180
tagctggggg tgtatggggg actacgaccg cttgtagctg ggggtgtatg ggggactatg 240
accgcttgta nctgggggtg tatgggggac tatgaccgct tgtgctgcct gggggatggg 300
aggagagttg tggttgggga aaaaaaaaaa aa 332

<210> 259
<211> 291
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(291)
<223> n = A,T,C or G

<400> 259
taccgcttgt gaccgcttgt gaccgcttgt gaccgcttgt gaccgcttgt gaccgcttgt 60
gaccgcttgt gaccgcttgt gaccgcttgt gaccgcttgt gaccgcttgt gaccgcttgt 120
gaccgcttgt gaccgcttgt nacngggggt gtctggggga ctatgannga ntgtnactgg 180
gggtgtctgg gggnctatga nngantgtna cnggggggtgt ctgggggact atganngact 240
gtgcnnnctg ggggatcnga ggagantngn ggntagngat ggttngggan a 291

<210> 260
<211> 238
<212> DNA
<213> Homo sapien

<400> 260
taagagggta ctggttaaaa tacaggaaat ctggggtaat gaggcagaga accaggatac 60
tttgaggtca gggatgaaaa ctagaatttt tttctttttt tttgcctgag aaacttgctg 120
ctctgaagag gcccatgtat taattgcttt gatcttcctt ttcttacagc cctttcaagg 180
gcagagccct ccttatcctg aaggaatctt atccttagct atagtatgta ccctctta 238

<210> 261
<211> 746
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(746)
<223> n = A,T,C or G

<400> 261
ttgggcacct tcaatatcaa tagctaacat ttattgagtg tttatcgtat cataaaacac 60
tgttctaagc ctttaaacgt actaattcat ttaatgctca taatcacttt agaaggtggg 120
tactagtatt agtctcattt acagatgcaa catgcaggca cagagaggtt aattaacttg 180
cccaaggtaa cacagctaag aaatagaaaa aatattgaat ctggaaagtt gggcttctgg 240
gtaacccaca gagtcttcaa tgagcctggg gcctcactca gtttgctttt acaaagcgaa 300
tgagtaacat cacttaattc agtgagtagg ccaaatggag gtcagctacg agtttctgct 360
gttcttgcag tggactgaca gatgtttaca acgtctggcc atcagtwaat ggactgatta 420
tcattgggaw gtgggtgggc tgaatgttgg ccagtgaagt ttattcawgc catattttta 480
tgtttaggat gacttttggc tggtcctagg gcaagctctg tctgscacgg aacacagaat 540
wacacaggga ccccctcaat ttctggtgtg gctagaacca tgaaccactg gttgggggaa 600
caagcggtca aaacctaagt gcggccggct ggcagggtcc acccatatgg ggaaaactcc 660
cnacgcgttt ggaatgcctn agctngaatt attctaanag ttgtccncnt aaaattagcc 720
tgggcgttaa tcangggtcn naagcc 746

<210> 262
<211> 588
<212> DNA

<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(588)
<223> n = A,T,C or G

<400> 262
tgaccgcttg tcatctcaca tggggtcctg cacgcttttg cctttgtagg aaacctgaca 60
tttgtctgtt tcttctttct cttttccttc ccatatcctc ctaatttacg tttgacttgt 120
ttgctgagga ggcaggagct agagactgct gtgagctcat aggggtggga agtttatcct 180
tcaagtcccg cccactcatc actgcttctc accttccccc gaccaggctt acaagtgggt 240
tcttgcctgc tttccctttg gacccaacaa gcccctgtaa tgagtgtgca tgactctgac 300
agctgtggac tcagggtcct tggctacagc tgccatgtaa aatatctcat ccagttctcg 360
caaattgtta aaataaccac atttcttaga ttccagtacc caaatcatgt ctttacgaac 420
tgctcctcac acccagaagt ggcacaataa ttcttgggga attattactt ttttttttct 480
ctctnttnnc gnnngnnnng gnnngnccag gaattaccac nttggaagac ctggccngaa 540
tttattatan aggggagccg attntttttc ctaacacaaa gcgggtca 588

<210> 263
<211> 730
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(730)
<223> n = A,T,C or G

<400> 263
ttttttttt tttggcctga gcaactgaaa ttatgaaatt tccatatact caaaagagta 60
agactgcaaa aagattaaat gtaaaagttg tcttgtatac agtaatgttt aagataccta 120
ttanatttat aaatggaaaa ttagggcatt tggatataca agttgaaaat tcaggagtga 180
ggttgggctg gctgggtata tactgaaaac tgtcagtaca cagatgacat ctaaaaccac 240
aaatctggtt ttatttttagc agtgatatgt gtcactccca caaaagcctt cccaattggc 300
ctcagcatac acaacaagtc acctccccac agccctctac acataaacaa attccttagt 360
ttagttcagg aggaaatgcg ccctttttcct tccgctctag gtgaccgcaa ggcccagttc 420
tcgtcaccaa gatgttaagg gaagtctgcc aaagaggcat ctgaaaggaa ataaggggaa 480
tgggagtgac cacaaaggaa agccaaggan aaactttgga gaccgtttct agancctgg 540
catttcacaa caaaactcng gaacaaacct tgtctcatca atcatttaag cccttcgttt 600
ggannagact ttctgaactg ggcgctgaac ataancctca ttgaatgtct tcacagtctc 660
ccagctgaag gcacaccttg ggccagaagg ggaatcttcc aggtcctcaa nacagggctc 720
gccctttgnc 730

<210> 264
<211> 715
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature

<222> (1)...(715)
<223> n = A,T,C or G

<400> 264
ttttttttttt tttggccagt atgatagtct ctaccactat attgaagctc ttaggtcatt 60
tacacttaat gtggttatag atgctgttga gcttacttct accaccttgc tatttctccc 120
gtctcttttt tgttcctttt ctcttctttt cctcccttat tttataattg aatttttag 180
gattctattt tatatagatt tatcagctat aacactttgt attcttttgt tttgtggttc 240
ttctgtcatt tcaatgtgca tcttaaactc atcacaatct attttcaaat aatatcatat 300
aaccttacat ataatgtaag aatctaccac catatatttc catttctccc ttccatccta 360
tgtntgtcat attttttcct ttatatatgt tttaaagaca taatagtata tgggaggttt 420
ttgcttaaaa tgtgatcaat attccttcaa ngaaacgtaa aaattcaaaa taaatntctg 480
tttattctca aatnnaccta atatttccta ccatntctna tacntttcaa gaatctgaag 540
gcattggttt tttccggctt aagaacctcc tctaaagcac tctaagcaga attaagtctt 600
ctgggagagg aattctccca agcttgggcc ttnanntgta ctccntnang gttaaanttt 660
ggccgggaaa tagaaattcc aagttaacag gntantttt ntttttnttn tcncc 715

<210> 265
<211> 152
<212> DNA
<213> Homo sapien

<400> 265
ttttttttttt tttcccaaca caaagcacca ttatctttcc tcacaatttt caacatagtt 60
tgattcccat gaagaggtta tgatttctaa agaaaacatg gctactatac tatcaatcag 120
ggttaaatct ttttttttttg agacggagtt ta 152

<210> 266
<211> 193
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(193)
<223> n = A,T,C or G

<400> 266
taaactccgt ccccttctta atcaatatgg aggctaccca ctccacatta ccttcttttc 60
aagggactgt ttccgtaact gttgtgggta ttcacgacca ggcttctaaa cctcttaaaa 120
ctccccaatt ctggtgccaa cttggacaac atgcttttttt ttttttttttt ttttttttttn 180
gagacggagt tta 193

<210> 267
<211> 460
<212> DNA
<213> Homo sapien

<400> 267
tgttgcgatc ccttaagcat gggtgctatt aaaaaaatgg tggagaagaa aatacctgga 60
atttacgtct tatctttaga gattgggaag accctgatgg aggacgtgga gaacagcttc 120

Sub A1

ttcttgaatg tcaattccca agtaacaaca gtgtgtcagg cacttgctaa ggatcctaaa 180
ttgcagcaag gctacaatgc tatgggattc tcccagggag gccaatttct gagggcagtg 240
gctcagagat gcccttcacc tcccatgatc aatctgatct cggttggggg acaacatcaa 300
ggtgtttttg gactccctcg atgcccagga gagagctctc acatctgtga cttcatccga 360
aaaacactga atgctggggc gtactccaaa gttgttcagg aacgcctcgt gcaagccgaa 420
tactggcatg acccataaaa ggaggatgtg gatcgcaaca 460

<210> 268
<211> 533
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(533)
<223> n = A,T,C or G

<400> 268
tgttgcgatc cgttgataga atagcgacgt ggtaatgagt gcatggcacg cctccgactt 60
accttcgccc gtggggaccc cgagtacgtc tacggcgtcg tcacttagag taccctctgg 120
acgcccgggc gcgttcgatt taccggaagc gcgagctgca gtgggcttgc gccccggcc 180
aaattctttg gggggtttaa ggccgcgggg aatttgaggt atctctatca gtatgtagcc 240
aagttggaac agtcgccatt cccgaaatcg ctttctttga atccgcaccg cctccagcat 300
tgcctcattc atcaacctga aggcacgcat aagtgacggt tgtgtcttca gcagctccac 360
tccataacta gcgcgctcga cctcgtcttc gtacgcgcca ggtccgtgcg tgcgaattcc 420
caactccggt gagttgcgca tttcaagttn cgaaactgtt cgcctccacn atttggcatg 480
ttcacgcatg acacggaata aactcgtcca gtaccgggaa tgggatcgca aca 533

<210> 269
<211> 50
<212> DNA
<213> Homo sapien

<400> 269
ttttttttt ttcgcctgaa ttagctacag atcctcctca caagcggtca 50

<210> 270
<211> 519
<212> DNA
<213> Homo sapien

<400> 270
tgttgcgatc caaataaccc accagcttct tgcacacttc gcagaagcca ccgtcctttg 60
gctgagtcac gtgaacggtc agtgcaagca gccgcgtgcc agagcagagg tgcagcatgc 120
tgcacaccag ctcagggctg acctcctcca gcaggatgga caggatggag ctgccgtacg 180
tgtccaccac ctcctggcac tcttccgaca gggacttcgg cagcttcgag cacattttgt 240
caaaagcgtc gagtatttct ttctcagtct tgttgttgtc aatcagcttg gtcacctcct 300
tcaccaggaa ttcacacacc tcacagtaaa catcagactt tgctgggacc tcgtgcttct 360
taatgggctc caccagttcc agggcaggga tgacattctt ggaggccact ttggcgggga 420
ccagagtctg catgggcatc tctttcacct catcacagaa cccaaccagc gcacagatct 480
ccttgggttg catgtgcatc atcatctggg atcgcaaca 519

<210> 271
<211> 457
<212> DNA
<213> Homo sapien

<400> 271
ttttttttt ttcgggcggc gaccggacgt gcactcctcc agtagcggct gcacgtcgtg 60
ccaatggccc gctatgagga ggtgagcgtg tccggcttcg aggagttcca ccgggccgtg 120
gaacagcaca atggcaagac cattttcgcc tactttacgg gttctaagga cgccgggggg 180
aaaagctggt gccccgactg cgtgcaggct gaaccagtcg tacgagaggg gctgaagcac 240
attagtgaag gatgtgtgtt catctactgc caagtaggag aagagcctta ttggaaagat 300
ccaaataatg acttcagaaa aaacttgaaa gtaacagcag tgcctacact acttaagtat 360
ggaacacctc aaaaactggt agaatctgag tgtcttcagg ccaacctggt ggaaatgttg 420
ttctctgaag attaagattt taggatggca atcaaga 457

<210> 272
<211> 102
<212> DNA
<213> Homo sapien

<400> 272
ttttttttt ttgggcaaca acctgaatac cttttcaagg ctctggcttg ggctcaagcc 60
cgcaggggaa atgcaactgg ccaggtcaca gggcaatcaa ga 102

<210> 273
<211> 455
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(455)
<223> n = A,T,C or G

<400> 273
ttttttttt ttggcaatca acaggtttaa gtcttcggcc gaagttaatc tcgtgttttt 60
ggcaatcaac aggtttaagt cttcggccga agttaatctc gtgtttttgg caatcaacag 120
gtttaagtct tcggccgaag ttaatctcgt gtttttggca atcaacaggt ttaagtcttc 180
ggccgaagtt aatctcgtgt ttttggcaat caacaggttt aagtcttcgg ccgaagttaa 240
tctcgtgttt ttggcaatca acaggtttaa gtcttcggcc gaagttaatc tcgtgttttt 300
ggcaatcaag aggtttaagt cttcggccga agttaatctc gtgtttttgg caatcaacag 360
gtttaagtct tcggccgaan ttaatctcgt gtttttggca atcaacaggt ttaantcttc 420
ggccgaagtt aatctcgtgt ttttggcaat caana 455

<210> 274
<211> 461
<212> DNA
<213> Homo sapien

<400> 274

Sub A1

ttttttttt ttggccaata cccttgatga acatcaatgt gaaaatcctc ggtaaaatac 60
tggcaaacca aatccagcag cacatcaaaa agcttatcca ccatgatcaa gtgggcttca 120
tccctgggat gcaaggctgg ttcaacataa gaaaatcaat aaatgtaatc catcacataa 180
acagaaccaa agacaaaaac cacatgatta tctcaataga tgcagaaaag gccttggaca 240
aattcaacag cccttcatgc taaacactct taataaacta gatattgatg gaatgtatct 300
caaaataata agagctattt atgacaaacc cacagccaat atcatactga atgggcaaag 360
actggaagca ttccctttga aaactggcac aagacaagga tgccctctct caccgctcct 420
attcaacata gtattggaag ttctggccag ggcaatcaag a 461

<210> 275
<211> 729
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(729)
<223> n = A,T,C or G

<400> 275
ttttttttt ttggccaaca ccaagtcttc cacgtgggag gttttattat gttttacaac 60
catgaaaaca taggaaggtg gctgttacag caaacatttc agatagacga atcggccaag 120
ctccccaaac cccaccttca cagcctcttc cacacgtctc ccanagattg ttgtccttca 180
cttgcaaatt canggatgtt ggaagtngac atttnnagtn gcnggaaccc catcagtgaa 240
ncantaagca gaantacgat gactttgana nacanctgat gaagaacacn ctacnganaa 300
ccctttctnt cgtgttanga tctcnngtcc ntcactaatg cggccccctg cnggtccacc 360
atttgggaga actccccccn cgttggatcc ccccttgagt ntcccattct ngtcccccan 420
accngncttg ngngncantn cnncctcnca ccntgtttcc ctgnngtnaa aatnngtttt 480
nccgccnccc naattcccac ccnaatcaca gcgaanccng aaggccttcn naagtgttta 540
angcccngng gtttcctcnt ntanttgcag cctaccctcc cngttnnnnt tncgngttgg 600
tcgcgccctg gncncgcctn gttcctcttt nnggnnacaa cctngntcnn nggcncntcn 660
nnnctnttcc tnnnactagc tngcctntcc ncnccgnggn ncannngcaca ttncncnnac 720
tntgtnncc 729

<210> 276
<211> 339
<212> DNA
<213> Homo sapien

<400> 276
tgacctgaca tgtagtagat acttaataaa tatttgtgga atgaatggat gaagtggagt 60
tacagagaaa aatagaaaag tacaaattgt tgtcagtgtt ttgaaggaaa attatgatct 120
ttcccaaagt tctgacttca ttctaagaca gggttagtat ctccatacat aattttactt 180
gcttttgaaa atcaaatgag ataatctatt tagattgata atttatttag actggctata 240
aactattaag tgctagcaaa tatacatttt aatctcattt tccacctctt gtgatatagc 300
tatgtaggtg ttgactttaa tggatgtcag gtcaatccc 339

<210> 277
<211> 664
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(664)
<223> n = A,T,C or G

<400> 277
tgacctgaca tccataacaa aatctttctc cattatattc ttctagggga atttcttgaa 60
aagcatccaa aggaaacaaa tgatggtaag accgtgccaa gtggggagca gacaccaaag 120
taagaccaca gattttacat tcaacaggta gctcacagta ctttgcccga cactgtgggc 180
agaaatagcc tcctaatgta agccctggct cagtattgcc atccaaatgc gccatgctga 240
aagagggttt tgcatcctgg tcagatnaag aagcaatggt gtgctgagga aatcccatac 300
gaataagtga gcattcagaa cttgagctag caggaggagg actaagatga tgtgtgagca 360
actctttgta atggctttca tctaaaataa catggtacgt gccaccagtt tcacgagcaa 420
gtacagtgca aacgcgaact tctgcagaca atccaataac agatactcta attttagctg 480
cctttagggt cttgattaaa tcataaatat tagatggatc gcaagttgta aggntgctaa 540
aagatgatta gtacttctcg acttgtatgt ccaggcatgt tgttttaaan tctgccttag 600
nccctgctta ggggaatttt taaagaagat ggctctccat gttcanggtc aatcacnaat 660
tgcc 664

<210> 278
<211> 452
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(452)
<223> n = A,T,C or G

<400> 278
tgacctgaca ttgaggaaga gcacacacct ctgaaattcc ttaggttcag aagggcattt 60
gacacagagt gggcctctga taattcatga aatgcattct gaagtcatcc agaatggagg 120
ctgcaatctg ctgtgctttg ggggttgcct cactgtgctc ctggatatca cacaaaagct 180
gcaatccttc ttcttcaact aacattttgc agtatttgct gggatttta ctgcagacat 240
gatacatagc ccatagtgcc cagagctgaa cctctggttg agagaagttg ccaaggagcg 300
ggaaaaatgt cttgaaagat ctataggtca ccaatgctgt catcttacaa cttgaacttg 360
gccaattctg tatggttgca tgcagatctt ggagaagagt acgcctctgg aagtcacggg 420
atatccaaan ctgtctgtca gatgtcaggt ca 452

<210> 279
<211> 274
<212> DNA
<213> Homo sapien

<400> 279
ttttttttt ttcggcaagg caaatttact tctgcaaaag ggtgctgctt gcacttttgg 60
ccactgcgag agcacaccaa acaaagtagg gaaggggttt ttatccctaa cgcggttatt 120
ccctggttct gtgtcgtgtc cccattggct ggagtcagac tgcacaatct acactgaccc 180
aactggctac tgtttaaaat tgaatatgaa taattaggta ggaaggggga ggctgtttgt 240
tacggtacaa gacgtgtttg ggcatgtcag gtca 274

<210> 280
<211> 272
<212> DNA
<213> Homo sapien

<400> 280
tacctgacat ggagaaataa cttgtagtat tttgcgtgca atggaatact atatgagggt 60
gaaaatgaat gaactagcaa tgcgtgtatc aacatgaata aatccccaaa acataataat 120
gttgaatgga aaaggtgagt ttcagaagga tatatatgcc ctctaaatcc atttatgtaa 180
acctttaaaa aactacatta tttatggtca taagtccatc cagaaaatat ttaaaaacct 240
acatgggatt gataactact gatgtcaggt ca 272

<210> 281
<211> 431
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(431)
<223> n = A,T,C or G

<400> 281
ttttttttt ttggccaata gcatgattta aacattggaa aaagtcaaat gagcaatgcg 60
aatttttatg ttctcttgaa taatcaaaag agtaggcaac attggttcct cattcttgaa 120
tagcattaat cagaaaatat tgcatagcct ctagcctcct tagagtaggt gtgctctctc 180
aaatatatca tagtcccaca gtttatttca tgtatatttt ctgcctgaat cacatagaca 240
tttgaatttg caacgcctga tgtaaatata taaattctta ccaatcagaa acatagcaag 300
aaattcaggg acttggtcat yatcagggta tgacagcana tccctgtara aacactgata 360
cacactcaca cacgtatgca acgtggagat gtcgcyttww kkktwywcwm rmrycrwcgn 420
aatcacttan n 431

<210> 282
<211> 98
<212> DNA
<213> Homo sapien

<400> 282
attcgattcg atgcttgagc ccaggagttc aagactgcag tgagccactg cacttcaggc 60
tggacaacag agcgagtccc tgtgccaaaa aaaaaaaa 98

<210> 283
<211> 764
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(764)
<223> n = A,T,C or G

<400> 283
ttttttttttt ttcgcaagca cgtgcacttt attgaatgac actgtagaca ggtgtgtggg 60
tataaactgc tgtatctagg ggcaggacca agggggcagg ggcaacagcc ccagcgtgca 120
gggccascat tgcacagtgg astgcaaagg ttgcaggcta tgggcggcta ctavtaaccc 180
cgtttttcct gtattatctg taacataata tggtagactg tcacagagcc gaatwccart 240
hacasgatga atccaawggt caygaggatg cccasaatca gggcccasat sttcaggcac 300
ttggcggtgg gggcatasgc ctgkgccccg gtcacgtcsc caaccwtcty cctgtcccta 360
cmcttgawtc cncncccttnn nntnccntna tntgcccgcc cncctcctng ngtcaaccng 420
natctgcact anctccctcn ccccttntgg antctcntcc ttcaantaan nttatccttn 480
acnccccccc cncctttccc ctnccncccn tnatcccngn nccnctatca ntcntnccct 540
cnctntnctn cnnatcgttc cncctnntaa ctacnctttn nacnannnct cactnatncc 600
ngnnanttct ttccttcccc cccnacgcnn tgcgtgcgcc cgtctngcct nnnctncgna 660
cccnnacttt atttaccttt ncaccctagc nctctacttn acccanccnc tcctacctcc 720
nggnccaccc nnccctnatc nctnnctctn tcnnctcntt cccc 764

<210> 284
<211> 157
<212> DNA
<213> Homo sapien

<400> 284
caagtgtagg cacagtgatg aaagcctgga gcaaacacaa tctgtgggta attaacgttt 60
atttctcccc ttccaggaac gtcttgcatg gatgatcaaa gatcagctcc tggtcaacat 120
aaataagcta gtttaagata cgttccccta cacttga 157

<210> 285
<211> 150
<212> DNA
<213> Homo sapien

<400> 285
attcgattgt actcagacaa caatatgcta agtggaagaa gtcagtcaca aaagaccaca 60
tactgtatga cttcatttac attaagtgtc cagaataggc aaatccgtag agacagaaag 120
tagatgagca gctgcctagg tctgagtaca 150

<210> 286
<211> 219
<212> DNA
<213> Homo sapien

<400> 286
attcgatttt ttttttttg gccatgatga aattcttact ccctcagatt ttttgtctgg 60
ataaatgcaa gtctcaccac cagatgtgaa attacagtaa actttgaagg aatctcctga 120
gcaaccttgg ttaggatcaa tccaatattc accatctggg aagtcaggat ggctgagttg 180
caggtcttta caagttcggg ctggattggt ctgagtaca 219

<210> 287
<211> 196
<212> DNA
<213> Homo sapien

Sub A1

<400> 287
attcgattct tgaggctacc aggagctagg agaagaggca tggaacaaat tttccctcat 60
atccatactc agaaggaacc aaccctgctg acaccttaat ttcagcttct ggcctctaga 120
actgtgagag agtacatttc tcttggttta agccaagaga atctgtcttt tggtacttta 180
tatcatagcc tcaaga 196

<210> 288
<211> 199
<212> DNA
<213> Homo sapien

<400> 288
attcgatttc agtccagtcc cagaacccac attgtcaatt actactctgt araagattca 60
tttgttgaaa ttcattgagt aaaacattta tgatccctta atatatgcca attaccatgc 120
taggtactga agattcaagt gaccgagatg ctagcccttg ggttcaagtg atccctctcc 180
cagagtgcac tggactgaa 199

<210> 289
<211> 182
<212> DNA
<213> Homo sapien

<400> 289
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tagtaataca gaagcaagta tctgtatatg taaacattaa aaaggtacag tgaaacttca 120
gtattataat cttagggacc accattatat atgtggtcca tcattggcca aaaaaaaaaa 180
aa 182

<210> 290
<211> 1646
<212> DNA
<213> Homo sapien

<400> 290
ggcacgagga gaaatgtaat tccatatttt atttgaaact tattccatat tttaattgga 60
tattgagtga ttgggttatc aaacacccac aaactttaat tttgttaaat ttatatggct 120
ttgaaataga agtataagtt gctaccattt tttgataaca ttgaaagata gtattttacc 180
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tgaggccaaa agtaaaggct ttaaattata acatatggga ttcttagtag tatgtttttt 300
tcttgaaact cagtggctct atctaacctt actatctcct cactctttct ctaagactaa 360
actctaggct cttaaaaatc tgcccacacc aatcttagaa gctctgaaaa gaatttgtct 420
ttaaatatct tttaatagta acatgtattt tatggaccaa attgacattt tcgactattt 480
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gcagtctcct taaaggtaga acaaatactt tctatttttt tttcaccatt gtgggattgg 660
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gacccatatt atcatattca cttaaaaaaa tgatttcctg tgcacctttt ggcaacttct 780
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aaaaaaaaaa aaaaaaaaaa aaaaaa 1646

<210> 291
<211> 1851
<212> DNA
<213> Homo sapien

<400> 291
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tcacttcctt taagcctttg tgactcttcc tctgatgtca gctttaagtc ttgttctgga 180
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cagcaagtat gagagcagtt cttccatatc tatccagcgc atttaaattc gctttttctt 420
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aaggtatgtc ccttctatgc ctgttttgct gagggtttta attctcgtgc c 1851

<210> 292
<211> 1851
<212> DNA
<213> Homo sapien

<400> 292
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tcacttcctt taagcctttg tgactcttcc tctgatgtca gctttaagtc ttgttctgga 180
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caaattacat gatgatgact agaaacagca tactctctgg ccgtctttcc agatcttgag 300
aagatacatc aacattttgc tcaagtagag ggctgactat acttgctgat ccacaacata 360
cagcaagtat gagagcagtt cttccatatc tatccagcgc atttaaattc gctttttttct 420
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cctttgtcag agctgtcctc tttttgttgt caaggacatt aagttgacat cgtctgtcca 720
gcacgagttt tactacttct gaattcccat tggcagaggc cagatgtaga gcagtcctct 780
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tcacataaac agaattaaaa gcaaagtcac ataagcatct caacagacac agaaaaggca 1680
tttgacaaaa tccagcatcc ttgtatttat tgttgcagtt ctcagaggaa atgcttctaa 1740
cttttcccca tttagtatta tgttggctgt gggcttgtca taggtggttt ttattacttt 1800
aaggtatgtc ccttctatgc ctgttttgct gagggtttta attctcgtgc c 1851

<210> 293
<211> 668
<212> DNA
<213> Homo sapien

<400> 293
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accrtataag agcagtgctt tggccattaa tttatctttc attrtagaca gcrtagtgya 180
gagtggtatt tccatactca tctggaatat ttggatcagt gccatgttcc agcaacatta 240
acgcacattc atcttcctgg cattgtacgg cctgtcagta ttagacccaa aaacaaatta 300
catatcttag gaattcaaaa taacattcca cagctttcac caactagtta tatttaaagg 360
agaaaactca tttttatgcc atgtattgaa atcaaaccca cctcatgctg atatagttgg 420

Sub A1

ctactgcata cctttatcag agctgtcctc tttttgttgt caaggacatt aagttgacat 480
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gcagtcctat gagagtgaga agacttttta ggaaattgta gtgcactagc tacagccata 600
gcaatgattc atgtaactgc aaacactgaa tagcctgcta ttactctgcc ttcaaaaaaa 660
aaaaaaaa 668

<210> 294
<211> 1512
<212> DNA
<213> Homo sapien

<400> 294
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tggtgctgcc gttgcttccc ctgctgcagg gagagcggca agagcaacgt gggcacttct 360
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actccaagaa aagttaaaca tgtttcagtg aatagagatc ctgctccttt ggcaagttcc 1440
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tgatctcgtg cc 1512

<210> 295
<211> 1853
<212> DNA
<213> Homo sapien

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tccatgccgg ctgcttcttc tgtgaagaag ccatttggtc tcaggagcaa gatgggcaag 300
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cactgcttcc cctgctgcag ggggagtggc aagagcaacg tgggcgcttc tggagaccac 480
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<210> 296
<211> 2184
<212> DNA
<213> Homo sapien

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Sub A1

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ctcaaaaaaa aaaaaaaaaa aaaa 2184

<210> 297
<211> 1855
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(1855)
<223> n = A,T,C or G

<400> 297
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<210> 298
<211> 1059
<212> DNA
<213> Homo sapien

<400> 298
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tgtcagtggc aaggtttaag atatttctga tctcgtgcc 1059

<210> 299
<211> 329
<212> PRT
<213> Homo sapien

<400> 299
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1 5 10 15
Leu His Leu Ala Gly Ser Asp Leu Leu Ser Arg Ser Leu Met Ala Glu
20 25 30
Glu Tyr Thr Ile Val His Ala Ser Phe Ile Ser Cys Ile Ser Ser Ser
35 40 45
Leu Asp Gly Gln Gly Glu Arg Gln Glu Gln Arg Gly His Phe Trp Arg
50 55 60
Pro Gln Arg Leu Leu Cys Glu Asp Ala Trp Glu Gln Glu Val Gln Val

Sub A1

65 70 75 80
Val Leu Pro Leu Leu Pro Leu Leu Gln Gly Ser Gly Lys Ser Asn Val
85 90 95
Val Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe Met Asp Pro Arg Tyr
100 105 110
His Val His Gly Glu Asp Leu Asp Lys Leu His Arg Ala Ala Trp Trp
115 120 125
Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met Leu Arg Asp Thr Asp
130 135 140
Val Asn Lys Arg Asp Lys Gln Lys Arg Thr Ala Leu His Leu Ala Ser
145 150 155 160
Ala Asn Gly Asn Ser Glu Val Val Lys Leu Val Leu Asp Arg Arg Cys
165 170 175
Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr Ala Leu Thr Lys Ala
180 185 190
Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met Leu Leu Glu His Gly
195 200 205
Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn Thr Thr Leu His Tyr
210 215 220
Ala Val Tyr Asn Glu Asp Lys Leu Met Ala Lys Ala Leu Leu Leu Tyr
225 230 235 240
Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly Leu Thr Pro Leu Leu
245 250 255
Leu Gly Ile His Glu Gln Lys Gln Gln Val Val Lys Phe Leu Ile Lys
260 265 270
Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr Gly Arg Thr Ala Leu
275 280 285
Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile Val Ser Pro Leu Leu
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Glu Gln Asn Val Asp Val Ser Ser Gln Asp Leu Glu Arg Arg Pro Glu
305 310 315 320
Ser Met Leu Phe Leu Val Ile Ile Met
325

<210> 300
<211> 148
<212> PRT
<213> Homo sapien

<220>
<221> VARIANT
<222> (1)...(148)
<223> Xaa = Any Amino Acid

<400> 300
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Trp Thr Ser Ser Thr Glu Leu Pro Trp Trp Gly Lys Val Pro Arg Lys
20 25 30
Asp Leu Ile Val Met Leu Arg Asp Thr Asp Val Asn Lys Xaa Asp Lys
35 40 45

Sub A1

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Gln Lys Arg Thr Ala Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu
    50                  55                  60
Val Val Lys Leu Xaa Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp
65                  70                  75                  80
Asn Lys Lys Arg Thr Ala Leu Xaa Lys Ala Val Gln Cys Gln Glu Asp
                85                  90                  95
Glu Cys Ala Leu Met Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro
            100                 105                 110
Asp Glu Tyr Gly Asn Thr Thr Leu His Tyr Ala Xaa Tyr Asn Glu Asp
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Lys Leu Met Ala Lys Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser
    130                 135                 140
Lys Asn Lys Val
145
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<210> 301
<211> 1155
<212> DNA
<213> Homo sapien

<400> 301

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gccagagagt atgctgtttc tagtcatcat catgtaattt gccagttact ttctgactac    1080
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<210> 302
<211> 2000
<212> DNA
<213> Homo sapien

<400> 302

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SubA1

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cctgacaacg aaagtgaaga gtatcacaga atttgtgaat tagtttctga ctacaaagaa 1440
aaacagatgc caaaatactc ttctgaaaac agcaacccag aacaagactt aaagctgaca 1500
tcagaggaag agtcacaaag gcttgagggc agtgaaaatg gccagccaga gctagaaaat 1560
tttatggcta tcgaagaaat gaagaagcac ggaagtactc atgtcggatt cccagaaaac 1620
ctgactaatg gtgccactgc tggcaatggt gatgatggat taattcctcc aaggaagagc 1680
agaacacctg aaagccagca atttcctgac actgagaatg aagagtatca cagtgacgaa 1740
caaaatgata ctcagaagca attttgtgaa gaacagaaca ctggaatatt acacgatgag 1800
attctgattc atgaagaaaa gcagatagaa gtggttgaaa aaatgaattc tgagctttct 1860
cttagttgta agaaagaaaa agacatcttg catgaaaata gtacgttgcg ggaagaaatt 1920
gccatgctaa gactggagct agacacaatg aaacatcaga gccagctaaa aaaaaaaaaa 1980
aaaaaaaaaa aaaaaaaaaa 2000

<210> 303
<211> 2040
<212> DNA
<213> Homo sapien

<400> 303
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agcaacgtgg gcacttctgg agaccacgac gactctgcta tgaagacact caggagcaag 180
atgggcaagt ggtgccgcca ctgcttcccc tgctgcaggg ggagtggcaa gagcaacgtg 240
ggcgcttctg gagaccacga cgactctgct atgaagacac tcaggaacaa gatgggcaag 300
tggtgctgcc actgcttccc ctgctgcagg gggagcggca agagcaaggt gggcgcttgg 360
ggagactacg atgacagtgc cttcatggag cccaggtacc acgtccgtgg agaagatctg 420
gacaagctcc acagagctgc ctggtggggt aaagtcccca gaaaggatct catcgtcatg 480
ctcagggaca ctgacgtgaa caagaaggac aagcaaaaga ggactgctct acatctggcc 540
tctgccaatg ggaattcaga agtagtaaaa ctcctgctgg acagacgatg tcaacttaat 600
gtccttgaca acaaaaagag gacagctctg ataaaggccg tacaatgcca ggaagatgaa 660
tgtgcgttaa tgttgctgga acatggcact gatccaaata ttccagatga gtatggaaat 720
accactctgc actacgctat ctataatgaa gataaattaa tggccaaagc actgctctta 780

Sub A1

tatggtgctg atatcgaatc aaaaaacaag catggcctca caccactgtt acttggtgta 840
catgagcaaa aacagcaagt cgtgaaattt ttaatcaaga aaaaagcgaa tttaaatgca 900
ctggatagat atggaaggac tgctctcata cttgctgtat gttgtggatc agcaagtata 960
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caagaaccag aaataaataa ggatggtgat agagagctag aaaattttat ggctatcgaa 1620
gaaatgaaga agcacggaag tactcatgtc ggattcccag aaaacctgac taatggtgcc 1680
actgctggca atggtgatga tggattaatt cctccaagga agagcagaac acctgaaagc 1740
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aagcaatttt gtgaagaaca gaacactgga atattacacg atgagattct gattcatgaa 1860
gaaaagcaga tagaagtggt tgaaaaaatg aattctgagc tttctcttag ttgtaagaaa 1920
gaaaaagaca tcttgcatga aaatagtacg ttgcgggaag aaattgccat gctaagactg 1980
gagctagaca caatgaaaca tcagagccag ctaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2040

<210> 304
<211> 384
<212> PRT
<213> Homo sapien

<400> 304
Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser Ser Val Lys Lys
1 5 10 15
Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Cys Arg Cys Phe
20 25 30
Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp
35 40 45
His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp
50 55 60
Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val
65 70 75 80
Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Asn
85 90 95
Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser
100 105 110
Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe
115 120 125
Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu His
130 135 140
Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met
145 150 155 160
Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln Lys Arg Thr Ala
165 170 175
Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu

Sub A1

```
            180                 185                 190
Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr
        195                 200                 205
Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met
    210                 215                 220
Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn
225                 230                 235                 240
Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys
                245                 250                 255
Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly
            260                 265                 270
Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val
        275                 280                 285
Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr
    290                 295                 300
Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile
305                 310                 315                 320
Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln Asp Leu
                325                 330                 335
Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His His Val
            340                 345                 350
Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys Ile
        355                 360                 365
Ser Ser Glu Asn Ser Asn Pro Glu Asn Val Ser Arg Thr Arg Asn Lys
    370                 375                 380
```

<210> 305
<211> 656
<212> PRT
<213> Homo sapien

<400> 305

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Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser Ser Val Lys Lys
 1               5                  10                  15
Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Cys Arg Cys Phe
            20                  25                  30
Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp
        35                  40                  45
His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp
    50                  55                  60
Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val
65                  70                  75                  80
Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Asn
                85                  90                  95
Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser
            100                 105                 110
Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe
        115                 120                 125
Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu His
    130                 135                 140
Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met
```

SubA1

```
145                 150                 155                 160
Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln Lys Arg Thr Ala
                165                 170                 175
Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu
            180                 185                 190
Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr
        195                 200                 205
Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met
    210                 215                 220
Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn
225                 230                 235                 240
Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys
                245                 250                 255
Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly
            260                 265                 270
Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val
        275                 280                 285
Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr
    290                 295                 300
Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile
305                 310                 315                 320
Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln Asp Leu
                325                 330                 335
Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His His Val
            340                 345                 350
Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys Ile
        355                 360                 365
Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp Leu Lys Leu Thr Ser Glu
    370                 375                 380
Glu Glu Ser Gln Arg Phe Lys Gly Ser Glu Asn Ser Gln Pro Glu Lys
385                 390                 395                 400
Met Ser Gln Glu Pro Glu Ile Asn Lys Asp Gly Asp Arg Glu Val Glu
                405                 410                 415
Glu Glu Met Lys Lys His Glu Ser Asn Asn Val Gly Leu Leu Glu Asn
            420                 425                 430
Leu Thr Asn Gly Val Thr Ala Gly Asn Gly Asp Asn Gly Leu Ile Pro
        435                 440                 445
Gln Arg Lys Ser Arg Thr Pro Glu Asn Gln Gln Phe Pro Asp Asn Glu
    450                 455                 460
Ser Glu Glu Tyr His Arg Ile Cys Glu Leu Val Ser Asp Tyr Lys Glu
465                 470                 475                 480
Lys Gln Met Pro Lys Tyr Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp
                485                 490                 495
Leu Lys Leu Thr Ser Glu Glu Glu Ser Gln Arg Leu Glu Gly Ser Glu
            500                 505                 510
Asn Gly Gln Pro Glu Leu Glu Asn Phe Met Ala Ile Glu Glu Met Lys
        515                 520                 525
Lys His Gly Ser Thr His Val Gly Phe Pro Glu Asn Leu Thr Asn Gly
    530                 535                 540
Ala Thr Ala Gly Asn Gly Asp Asp Gly Leu Ile Pro Pro Arg Lys Ser
545                 550                 555                 560
```

Sub A1

```
Arg Thr Pro Glu Ser Gln Gln Phe Pro Asp Thr Glu Asn Glu Glu Tyr
                565                 570                 575
His Ser Asp Glu Gln Asn Asp Thr Gln Lys Gln Phe Cys Glu Glu Gln
            580                 585                 590
Asn Thr Gly Ile Leu His Asp Glu Ile Leu Ile His Glu Glu Lys Gln
        595                 600                 605
Ile Glu Val Val Glu Lys Met Asn Ser Glu Leu Ser Leu Ser Cys Lys
    610                 615                 620
Lys Glu Lys Asp Ile Leu His Glu Asn Ser Thr Leu Arg Glu Glu Ile
625                 630                 635                 640
Ala Met Leu Arg Leu Glu Leu Asp Thr Met Lys His Gln Ser Gln Leu
                645                 650                 655
```

<210> 306
<211> 671
<212> PRT
<213> Homo sapien

<400> 306

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Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser Ser Val Lys Lys
 1               5                  10                  15
Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Cys Arg Cys Phe
            20                  25                  30
Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp
        35                  40                  45
His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp
    50                  55                  60
Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val
65                  70                  75                  80
Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Asn
                85                  90                  95
Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser
            100                 105                 110
Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe
        115                 120                 125
Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu His
    130                 135                 140
Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met
145                 150                 155                 160
Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln Lys Arg Thr Ala
                165                 170                 175
Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu
            180                 185                 190
Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr
        195                 200                 205
Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met
    210                 215                 220
Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn
225                 230                 235                 240
Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys
                245                 250                 255
```

Sub A1

```
Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly
            260                 265                 270
Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val
        275                 280                 285
Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr
    290                 295                 300
Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile
305                 310                 315                 320
Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln Asp Leu
                325                 330                 335
Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His His Val
            340                 345                 350
Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys Ile
        355                 360                 365
Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp Leu Lys Leu Thr Ser Glu
    370                 375                 380
Glu Glu Ser Gln Arg Phe Lys Gly Ser Glu Asn Ser Gln Pro Glu Lys
385                 390                 395                 400
Met Ser Gln Glu Pro Glu Ile Asn Lys Asp Gly Asp Arg Glu Val Glu
                405                 410                 415
Glu Glu Met Lys Lys His Glu Ser Asn Asn Val Gly Leu Leu Glu Asn
            420                 425                 430
Leu Thr Asn Gly Val Thr Ala Gly Asn Gly Asp Asn Gly Leu Ile Pro
        435                 440                 445
Gln Arg Lys Ser Arg Thr Pro Glu Asn Gln Gln Phe Pro Asp Asn Glu
    450                 455                 460
Ser Glu Glu Tyr His Arg Ile Cys Glu Leu Val Ser Asp Tyr Lys Glu
465                 470                 475                 480
Lys Gln Met Pro Lys Tyr Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp
                485                 490                 495
Leu Lys Leu Thr Ser Glu Glu Glu Ser Gln Arg Leu Glu Gly Ser Glu
            500                 505                 510
Asn Gly Gln Pro Glu Lys Arg Ser Gln Glu Pro Glu Ile Asn Lys Asp
        515                 520                 525
Gly Asp Arg Glu Leu Glu Asn Phe Met Ala Ile Glu Glu Met Lys Lys
    530                 535                 540
His Gly Ser Thr His Val Gly Phe Pro Glu Asn Leu Thr Asn Gly Ala
545                 550                 555                 560
Thr Ala Gly Asn Gly Asp Asp Gly Leu Ile Pro Pro Arg Lys Ser Arg
                565                 570                 575
Thr Pro Glu Ser Gln Gln Phe Pro Asp Thr Glu Asn Glu Glu Tyr His
            580                 585                 590
Ser Asp Glu Gln Asn Asp Thr Gln Lys Gln Phe Cys Glu Glu Gln Asn
        595                 600                 605
Thr Gly Ile Leu His Asp Glu Ile Leu Ile His Glu Glu Lys Gln Ile
    610                 615                 620
Glu Val Val Glu Lys Met Asn Ser Glu Leu Ser Leu Ser Cys Lys Lys
625                 630                 635                 640
Glu Lys Asp Ile Leu His Glu Asn Ser Thr Leu Arg Glu Glu Ile Ala
                645                 650                 655
Met Leu Arg Leu Glu Leu Asp Thr Met Lys His Gln Ser Gln Leu
```

Sub A1

660 665 670

<210> 307
<211> 800
<212> DNA
<213> Homo sapien

<400> 307
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acttcatttt tggtacataa catctttata ggacaggggt aaaatcccaa tactaacagg 120
agaatgctta ggactctaac aggtttttga gaatgtgttg gtaagggcca ctcaatccaa 180
tttttcttgg tcctccttgt ggtctaggag gacaggcaag ggtgcagatt ttcaagaatg 240
catcagtaag ggccactaaa tccgaccttc ctcgttcctc cttgtggtct gggaggaaaa 300
ctagtgtttc tgttgctgtg tcagtgagca caactattcc gatcagcagg gtccagggac 360
cactgcaggt tcttgggcag ggggagaaac aaaacaaacc aaaaccatgg gcrgttttgt 420
ctttcagatg ggaaacactc aggcatcaac aggctcacct ttgaaatgca tcctaagcca 480
atgggacaaa tttgacccac aaaccctgga aaaagaggtg gctcattttt tttgcactat 540
ggcttggccc caacattctc tctctgatgg ggaaaaatgg ccacctgagg gaagtacaga 600
ttacaatact atcctgcagc ttgacctttt ctgtaagagg gaaggcaaat ggagtgaaat 660
accttatgtc caagctttct tttcattgaa ggagaataca ctatgcaaag cttgaaattt 720
acatcccaca ggaggacctc tcagcttacc cccatatcct agcctcccta tagctccccc 780
tcctattagt gataagcctc 800

<210> 308
<211> 102
<212> PRT
<213> Homo sapien

<220>
<221> VARIANT
<222> (1)...(102)
<223> Xaa = Any Amino Acid

<400> 308
Met Gly Xaa Phe Val Phe Gln Met Gly Asn Thr Gln Ala Ser Thr Gly
1 5 10 15
Ser Pro Leu Lys Cys Ile Leu Ser Gln Trp Asp Lys Phe Asp Pro Gln
20 25 30
Thr Leu Glu Lys Glu Val Ala His Phe Phe Cys Thr Met Ala Trp Pro
35 40 45
Gln His Ser Leu Ser Asp Gly Glu Lys Trp Pro Pro Glu Gly Ser Thr
50 55 60
Asp Tyr Asn Thr Ile Leu Gln Leu Asp Leu Phe Cys Lys Arg Glu Gly
65 70 75 80
Lys Trp Ser Glu Ile Pro Tyr Val Gln Ala Phe Phe Ser Leu Lys Glu
85 90 95
Asn Thr Leu Cys Lys Ala
100

<210> 309
<211> 9

Sub A1

<212> PRT
<213> Artificial Sequence

<220>
<223> Made in the lab

<400> 309
Leu Met Ala Glu Glu Tyr Thr Ile Val
1 5

<210> 310
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in the lab

<400> 310
Lys Leu Met Ala Lys Ala Leu Leu Leu
1 5

<210> 311
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in the lab

<400> 311
Gly Leu Thr Pro Leu Leu Leu Gly Ile
1 5

<210> 312
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in the lab

<400> 312
Lys Leu Val Leu Asp Arg Arg Cys Gln Leu
1 5 10

<210> 313
<211> 1852
<212> DNA
<213> Homo sapiens

<400> 313
ggcacgagaa ttaaaaccct cagcaaaaca ggcatagaag ggacatacct taaagtaata 60
aaaaccacct atgacaagcc cacagccaac ataatactaa atggggaaaa gttagaagca 120
tttcctctga gaactgcaac aataaataca aggatgctgg attttgtcaa atgccttttc 180
tgtgtctgtt gagatgctta tgtgactttg cttttaattc tgtttatgtg attatcacat 240
ttattgactt gcctgtgtta gaccggaaga gctggggtgt ttctcaggag ccaccgtgtg 300
ctgcggcagc ttcgggataa cttgaggctg catcactggg gaagaaacac aytcctgtcc 360
gtggcgctga tggctgagga cagagcttca gtgtggcttc tctgcgactg gcttcttcgg 420
ggagttcttc cttcatagtt catccatatg gctccagagg aaaattatat tattttgtta 480
tggatgaaga gtattacgtt gtgcagatat actgcagtgt cttcatctct tgatgtgtga 540
ttgggtaggt tccaccatgt tgccgcagat gacatgattt cagtacctgt gtctggctga 600
aaagtgtttg tttgtgaatg gatattgtgg tttctggatc tcatcctctg tgggtggaca 660
gctttctcca ccttgctgga agtgacctgc tgtccagaag tttgatggct gaggagtata 720
ccatcgtgca tgcatctttc atttcctgca tttcttcctc cctggatgga caggggagc 780
ggcaagagca acgtgggcac ttctggagac cacaacgact cctctgtgaa gacgcttggg 840
agcaagaggt gcaagtggtg ctgccactgc ttcccctgct gcaggggggag cggcaagagc 900
aacgtggtcg cttggggaga ctacgatgac agcgccttca tggatcccag gtaccacgtc 960
catggagaag atctggacaa gctccacaga gctgcctggt ggggtaaagt ccccagaaag 1020
gatctcatcg tcatgctcag ggacacggat gtgaacaaga gggacaagca aaagaggact 1080
gctctacatc tggcctctgc caatgggaat tcagaagtag taaaactcgt gctggacaga 1140
cgatgtcaac ttaatgtcct tgacaacaaa aagaggacag ctctgacaaa ggccgtacaa 1200
tgccaggaag atgaatgtgc gttaatgttg ctggaacatg gcactgatcc aaatattcca 1260
gatgagtatg gaaataccac tctacactat gctgtctaca atgaagataa attaatggcc 1320
aaagcactgc tcttatacgg tgctgatatc gaatcaaaaa acaagcatgg cctcacacca 1380
ctgctacttg gtatacatga gcaaaaacag caagtggtga aatttttaat caagaaaaaa 1440
gcgaatttaa atgcgctgga tagatatgga agaactgctc tcatacttgc tgtatgttgt 1500
ggatcagcaa gtatagtcag ccctctactt gagcaaaatg ttgatgtatc ttctcaagat 1560
ctggaaagac ggccagagag tatgctgttt ctagtcatca tcatgtaatt tgccagttac 1620
tttctgacta caaagaaaaa cagatgttaa aaatctcttc tgaaaacagc aatccagaac 1680
aagacttaaa gctgacatca gaggaagagt cacaaaggct taaaggaagt gaaaacagcc 1740
agccagagct agaagattta tggctattga agaagaatga agaacacgga agtactcatg 1800
tgggattccc agaaaacctg actaacggtg ccgctgctgg caatggtgat ga 1852

<210> 314
<211> 879
<212> DNA
<213> Homo sapiens

<400> 314
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aacgtgggca cttctggaga ccacaacgac tcctctgtga agacgcttgg gagcaagagg 120
tgcaagtggt gctgccactg cttcccctgc tgcaggggga gcggcaagag caacgtggtc 180
gcttggggag actacgatga cagcgccttc atggatccca ggtaccacgt ccatggagaa 240
gatctggaca agctccacag agctgcctgg tggggtaaag tccccagaaa ggatctcatc 300
gtcatgctca gggacacgga tgtgaacaag agggacaagc aaaagaggac tgctctacat 360
ctggcctctg ccaatgggaa ttcagaagta gtaaaactcg tgctggacag acgatgtcaa 420
cttaatgtcc ttgacaacaa aaagaggaca gctctgacaa aggccgtaca atgccaggaa 480
gatgaatgtg cgttaatgtt gctggaacat ggcactgatc caaatattcc agatgagtat 540
ggaaatacca ctctacacta tgctgtctac aatgaagata aattaatggc caaagcactg 600
ctcttatacg gtgctgatat cgaatcaaaa aacaagcatg gcctcacacc actgctactt 660
ggtatacatg agcaaaaaca gcaagtggtg aaatttttaa tcaagaaaaa agcgaattta 720

aatgcgctgg atagatatgg aagaactgct ctcatacttg ctgtatgttg tggatcagca 780
agtatagtca gccctctact tgagcaaaat gttgatgtat cttctcaaga tctggaaaga 840
cggccagaga gtatgctgtt tctagtcatc atcatgtaa 879

<210> 315
<211> 293
<212> PRT
<213> Homo sapiens

<400> 315
Met His Leu Ser Phe Pro Ala Phe Leu Pro Pro Trp Met Asp Arg Gly
5 10 15

Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp His Asn Asp Ser Ser
20 25 30

Val Lys Thr Leu Gly Ser Lys Arg Cys Lys Trp Cys Cys His Cys Phe
35 40 45

Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val Val Ala Trp Gly Asp
50 55 60

Tyr Asp Asp Ser Ala Phe Met Asp Pro Arg Tyr His Val His Gly Glu
65 70 75 80

Asp Leu Asp Lys Leu His Arg Ala Ala Trp Trp Gly Lys Val Pro Arg
85 90 95

Lys Asp Leu Ile Val Met Leu Arg Asp Thr Asp Val Asn Lys Arg Asp
100 105 110

Lys Gln Lys Arg Thr Ala Leu His Leu Ala Ser Ala Asn Gly Asn Ser
115 120 125

Glu Val Val Lys Leu Val Leu Asp Arg Arg Cys Gln Leu Asn Val Leu
130 135 140

Asp Asn Lys Lys Arg Thr Ala Leu Thr Lys Ala Val Gln Cys Gln Glu
145 150 155 160

Asp Glu Cys Ala Leu Met Leu Leu Glu His Gly Thr Asp Pro Asn Ile
165 170 175

Pro Asp Glu Tyr Gly Asn Thr Thr Leu His Tyr Ala Val Tyr Asn Glu
180 185 190

Asp Lys Leu Met Ala Lys Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu
195 200 205

Ser Lys Asn Lys His Gly Leu Thr Pro Leu Leu Leu Gly Ile His Glu
210 215 220

Sub A1

Gln Lys Gln Gln Val Val Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu
225 230 235 240

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